Australian Consumers' Association

October 2000

CHOICE

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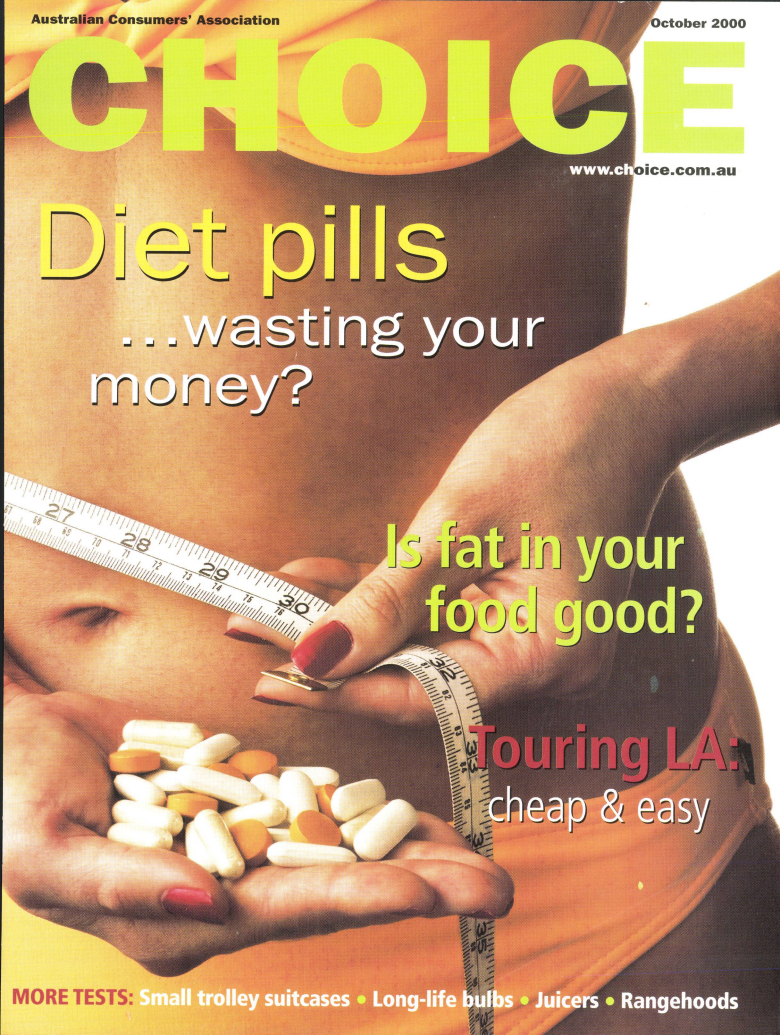
Diet pills ...wasting your money?

Is fat in your food good?

Touring LA: cheap & easy



MORE TESTS: Small trolley suitcases • Long-life bulbs • Juicers • Rangehoods

Thinking about holidays?

Jane Mackenzie

CHOICE hasn't covered holiday destinations for many years (it's an expensive sort of test), but we recently teamed up with our New Zealand counterpart, *Consumer*, to bring you the CHOICE travel guide to Los Angeles (page 10).

This isn't the usual glossy travel article with bright-coloured pictures and enthusuastic blurb about places you can't afford to visit. The idea is to help you with the practical side of a holiday: how to get around, lose the queues, find the freebies, avoid the rip-offs. It covers precisely the sort of information most travel articles leave you wondering about.

For example, did you know that Disneyland is 71 km from Universal Studios (so you're not likely to be visiting both on the same day)? That you can get a bus from the airport to Santa Monica for just $1? Or that Knott's Berry Farm is cheaper after 4 pm and open late, so you could fit it in one day after Disneyland (which is in the same area)?

If you want to rationalise your luggage, a trolley suitcase small enough to carry on a plane as hand baggage is a great idea. With the help of six Qantas flight crew (the experts in short-term travel) we road-tested 15. We found out which ones are easiest to manoeuvre, which stand up to rigorous use and which will protect your clothes in a downpour (none of them, unfortunately). But if you're planning a trip — for business or pleasure — there are models here you'll probably be happy with (see page 24).

Even though it's only October, many of us are probably already thinking of spring or summer holidays. We hope this issue of CHOICE helps you (or at least gets your imagination going). Look out for our rating of travel insurance policies in an issue coming up very soon.

Jane Mackenzie
Editor

Your letters

We welcome the letters you send us — please always include a daytime telephone number so we can contact you quickly if we want to follow up your letter. We're sorry we can't personally answer every letter we receive, but we do use them in our research. Thanks for taking the time to keep in touch.
Write to us at CHOICE, 57 Carrington Road, Marrickville 2204.
Phone us on (02) 9577 3399. Fax us on (02) 9577 3355.
email us at ausconsumer@choice.com.au
World Wide Web address: www.choice.com.au

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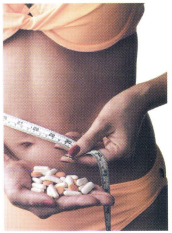
It's new, amazing, fast, easy… weight loss guaranteed! Don't believe it. Potions and pills aren't the answer, unfortunately. We look at the 'magic' ingredients and give you a verdict.



Cover photo: Kent Mears

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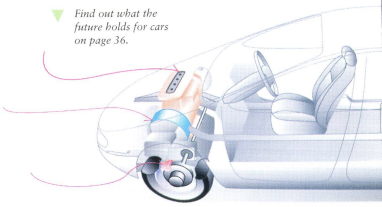
Find out what the future holds for cars on page 36.



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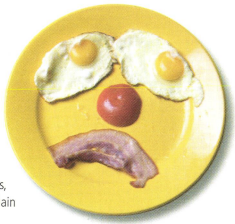

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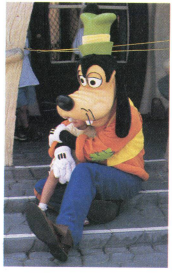
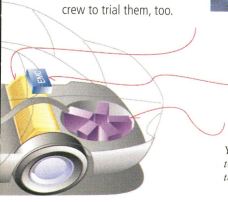
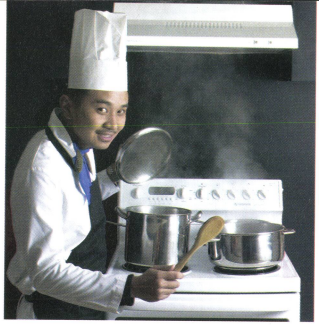
Racing to catch that early morning flight, or to make it to the meeting at the other end, struggling with your suitcase? One of these carry-on trolley suitcases might be just the ticket. We got some cabin crew to trial them, too.



You, too, can have your photo taken with Goofy. See page 10.



Yummy freshly squeezed juice to get you going. Look at our test of juicers on page 31.



Get the steam out of the kitchen — see our rangehood test on page 39.

31 **Fresh juice**
Freshly squeezed juice first thing in the morning; or a thirst quenching, exotic fruit mixture on a hot day — either way, we've tested a range of juicers to see what they can do in the comfort of your kitchen.

39 **Rangehoods**
If someone in your household likes kippers for breakfast, you'll definitely want a rangehood to suck away that unmistakable fragrance… or ask them, nicely, to move out.

44 **Exterior paints: most are worth a brush**
Year three of our test finds just a few more paints best left on the shelf. And we give some preparation and painting tips. Have a look.

Deregulated electricity: cooking dinner at 10 pm?

Remember when telstra was the only provider of phone services? Haven't times changed? Deregulation of the phone market and competition between a multitude of private providers has meant call prices have fallen through the floor.

Now deregulation of the electricity market is just around the corner in Victoria and Queensland: as of January 1, 2001, you'll be able to choose your power company. NSW and the ACT will follow a year later, other states and the NT not until 2003.

But will deregulation have the same dramatic impact on electricity prices? Probably not for most people.

Currently, a power meter measures your household's total consumption. Apart from special off-peak hot water or heating tariffs, the price you pay for each kWh is the same no matter what time of day you use it. It's an average price that's within the constraints set by each state's utility pricing body. That's where the regulation comes in.

Deregulation is based on the National Electricity Market (NEM) buying from power generators and selling to power retailers all the energy in the participating states, and setting half-hourly prices reflecting demand and supply at that time. For example, there's less demand for electricity at night, so it'd be cheaper.

Retailers will apply different profit margins to those half-hourly wholesale prices, depending on what type of consumer they're targeting — residential or business, for example.

So if they have a half-hourly price structure, it'll be no surprise that they'll want to charge you according to your electricity consumption in every half-hour interval. But how? And if you want to take advantage of the low tariffs offered by a particular retailer at times of the day that suit you, how can you prove that you're using your electricity during those hours?

The answer is a new type of electricity meter, and you're likely to have to pay for it — either directly or via the electricity price.

If changing to a particular retailer reduces your bill, you probably won't mind because you'll save in the long run. But think about it. How flexible is your electricity consumption? Are you likely to take a shower, cook dinner or watch the news at a different time because power's cheaper then?

If you think you can't benefit from a deregulated market and a choice of retailer, will you still have to get and pay for the new meter? Or will there still be an average power price that applies around the clock?

CHOICE thinks there needs to be a system that keeps electricity pricing based on realistic usage patterns of residential consumers. One suggestion is to develop a 'usage profile' by surveying households to find an average time-of-use pattern, and base the pricing on that. The current single-register meters could then be retained by households that didn't opt to change the way they pay for their electricity.

These meters could continue to be read on the same monthly, bi-monthly or quarterly cycle as at present. This would match the needs of most residential consumers with the simplest and lowest-cost system, rather than trying to force them to conform to a model designed for high-volume commercial users.

We'll keep you posted.

develop a user profile

Rebate for solar wate

One of the best things you can do for the environment is install a solar hot-water system, saving tonnes of carbon dioxide each year. The Victorian government is offering Victorians a rebate on solar systems and solar-boosted heat pumps accredited by the Sustainable Energy Authority Victoria (SEAV).

If your home has a gas connection, you only get the rebate if you install a gas-boosted system. If it doesn't have a gas connection, you can get the rebate on electric-boosted systems. The rebate ranges from $800 to $1000 for a standard 300 L system, depending on performance.

Call SEAV on 1300 363 744 for more information on how to apply, or visit its website at www.seav.vic.gov.au/solarhotwater.

New test results

SEAV assessed the performance of solar water heaters and solar-boosted heat pumps. They tested electric-boosted thermosiphon systems with the electric element installed so it dipped lower in the tank instead of straight across (which is the standard option). This increases the amount of water heated by electricity, reducing the solar savings. However, it's less likely you'll run out of hot water on cloudy days, and it allows you to connect the system to the cheap off-peak (night) tariff.

Can you help?

Standby power measurements

Electric and electronic appliances play a big part in modern households, and some spend most of their time waiting rather than doing their job.

Your TV and VCR stand by for you to press the 'on' button on the remote so they can entertain you. Your cordless phone, fax and answering machine are plugged into a power point all day, waiting for you to use them.

Each appliance and gadget that's plugged in draws electricity when on standby, and sometimes even when switched off (for example, some printers and scanners). Often it's only a tiny amount of electricity — say, two or three watts — costing you only a few dollars a year.

However, overseas studies show those tiny amounts can add up to 10% of a household's electricity consumption. Just imagine: 10% of your electricity bill spent for appliances doing nothing.

CHOICE, in co-operation with the Commonwealth, state and territory governments, wants to find out what the situation is in Australia. We need at least 60 households in Melbourne, Sydney and Brisbane that will allow us to measure the power consumption of all the electric and electronic appliances in the house.

Be warned: this form of research is called 'intrusive' for a reason. You'll have to give us access to all the rooms in your house, and not mind us crawling behind your lounge or under your bed. It'll probably take two to three hours, and we'd like to visit some time in November.

If you're interested and live in Melbourne, Sydney or Brisbane, please send your home address and daytime phone number to **Standby power**, 57 Carrington Road, Marrickville 2204, or email it to standby@choice.com.au, by October 10.

We'll then send you a survey asking for some details of your household, which you'll need to fill in and return to us. This is necessary because we need to choose a mix representative of all Australian households.

What's in it for you? All the returned surveys will go into a draw for five 'energy-smart' kits, worth about $80 and containing two long-life light bulbs and a water-efficient shower head.

Thank you for your help.

heaters in Victoria

How to read the table

The table shows the CO_2 savings and payback period of a range of solar and heat-pump systems compared to different conventional ones, and for both southern and northern Victorian conditions. The payback period (how long till you break even compared with the conventional system) is calculated using the recommended retail price and applying the rebate. But shop around — you'll often be able to negotiate discounts. (Because there are very few conventional day-rate electric water heaters in Victoria, they weren't included in the comparison.)

If a system doesn't save on CO_2, the table reads '0' and the model isn't recommended as an alternative to that particular conventional system.

If a tested model costs more to run than a conventional system, it of course never pays off and the table reads 'na' (not applicable). Payback times of more than 15 years aren't very meaningful either, because you might move in that time, so the table reads '>15'.

Note: Powercor (one of the electricity retailers in western Victoria) offers a very cheap off-peak tariff specifically for solar water heaters, which will reduce the payback periods by approximately one third compared to the values in the table.

SOLAR AND HEAT-PUMP WATER SYSTEMS: SAVINGS COMPARED WITH OTHER SYSTEMS

				CO_2 and cost savings in southern / northern Victoria, compared with:					
				Off-peak electric		Standard gas		High-efficiency gas	
Brand / model (in order of CO_2 savings in southern Victoria)	**Type**	**Price** ($)	**Rebate** ($)	**CO_2 saved per year** (kg)	**Payback time with rebate** (years)	**CO_2 saved per year** (kg)	**Payback time with rebate** (years)	**CO_2 saved per year** (kg)	**Payback time with rebate** (years)
SOLAHART 302 BCXIIn	Thermosiphon gas	4891	1000	5806 / 5488	>15 / >15	983 / 1078	>15 / >15	552 / 671	>15 / >15
AQUAMAX G200SK2	Pumped gas	3480	900	5720 / 5326	10.1 / 10.2	897 / 916	>15 / 14.8	466 / 509	>15 / >15
QUANTUM Standard 270-S2-S	Heat pump	2541	900	4133 / 3911	>15 / >15	0 / 0	na / na	0 / 0	na / na
QUANTUM Turbo 270T2	Heat pump	2844	900	3977 / 3776	na / >15	0 / 0	na / na	0 / 0	na / na
SOLAHART 302 BCXII	Thermosiphon electric	4055	1000	3551 / 4212	>15 / 12.8	0 / 0	>15 / >15	0 / 0	>15 / >15
SOLAHART 302J	Thermosiphon electric	2986	900	2861 / 3457	9.5 / 7.9	0 / 0	>15 / 12.8	0 / 0	>15 / >15
BEASLEY Centurion 12S-315L	Pumped electric	2864	800	2831 / 3337	9.4 / 8.0	0 / 0	>15 / 13.2	0 / 0	>15 / >15
BEASLEY Solar Prestige HTM300	Thermosiphon electric	3023	800	2602 / 3049	11.9 / 10.2	0 / 0	>15 / >15	0 / 0	>15 / >15
EDWARDS LX305	Thermosiphon electric	3190	800	2569 / 3053	13.8 / 11.6	0 / 0	>15 / >15	0 / 0	>15 / >15
EDWARDS Economiser DES250	Pumped electric	3000	0 **(A)**	1627 / 2719	>15 / >15	0 / 0	>15 / >15	0 / 0	na / >15

na not applicable — never pays off.

(A) This model failed SEAV's performance requirements, so no rebate is currently available. The manufacturer says it will release an improved model soon.

Perfect match

Name tags. we wear them at conferences, meetings and singles nights — in fact, any function where the goal is to be social in a room full of strangers. But what about computerised name tags?

Daggy though they may seem, computerised name tags with flashing lights and more than just the wearer's name are being used in conferences in the US as successful icebreakers, and matchmaking versions are all the rage in Japan.

WWW.PETERLAND.CO.JP/GETTHEGUARDER.HTML

Unveiled as a conference stunt at MIT, electronic name tags were equipped with 8-bit microprocessors and 128 kilobytes of memory, and were programmed with the wearer's answers to five questions. When two people met, their badges used an infrared link to compare answers and flash red or green lights to indicate whether their answers matched.

The tags have also been used to monitor how ideas spread from person to person. Their LCD screens displayed a one-liner or motto chosen by the conference participants, who were then encouraged to change their motto if they saw one they liked better. Large displays around the conference monitored the success of ideas around the room and kept tabs on how well people were mingling.

The tags can match intellectual or business interests, and build relationships at entrepreneurial functions like First Tuesday, a monthly meeting held in 30 countries (including Australia) that's organised for people in the Internet industry to find funding for their business ideas.

The technology has already been put to less serious use as a matchmaker in Japan. The 'Lovegety' (left) is a pendant radio transmitter able to broadcast offers of a drink or chat to other Lovegety wearers. More sophisticated versions equipped with detailed matchmaking software are being planned for the US market.

WORLD CONSUMER SNAPSHOT

Chocoholics — saved by the smell!

It all started one Easter. You found yourself chomping away on some milk chocolate eggs, unable to stop. Before long you graduated to family-size blocks, and your morning bowl of muesli turned into Coco Pops. By the time your loose-fit jeans had turned into stretch denim, it was too late — you were hooked.

Well, chocoholics, take heart, because the anti-chocolate patch is about to arrive in Britain. You just stick it on your skin and, hey presto, your craving for chocolate disappears!

Unlike nicotine patches, nothing is absorbed through the skin. The patch emits a sweet fragrance combining vanilla and other secret scents that, according to researchers at St George's Hospital in London, may turn you off your chocolate. Very sweet smells release the mood chemical serotonin, just as chocolate does, making you feel good. It seems our senses may be fooled into believing they've already had their fill, and the desire for chocolate subsides.

Diet trials on overweight subjects showed the patched group lost far more weight than control groups wearing a placebo patch or no patch at all. Also on the way are patches designed to reduce cravings for fatty potato chips — and no, we're not kidding!

20 million sperm and counting

Speaking of tight pants, some studies are suggesting that European men are losing fertility. Apparently, poor diets, stress, environmental pollution and the Restrictive Trouser Factor are all proposed as possible reasons. Other studies say European men are fine. This, understandably, leaves the gents themselves a little confused.

However, according to Germany's *Test*, men now have the means to settle their status on this count once and for all. FertilMARQ, the home sperm-count kit, is here. All you need is a few seconds and a "private atmosphere". The kit contains two condoms to collect the, er, bodily fluids, together with two coated cups and solvent to prepare the sample for the test dipsticks. Like the familiar pregnancy test, after a few minutes they'll show by colour whether or not you have the goods, as it were. If your sample contains more than 20 million sperm per millilitre — established as the minimum requirement for fertility by the World Health Organization — you'll get a positive result.

No doubt Aussie men will see great potential in this new technology to assist their bragging in the changing sheds; but the count alone doesn't guarantee fertility. Apparently you not only need the numbers, but the little fellows have to be agile and good-looking as well…

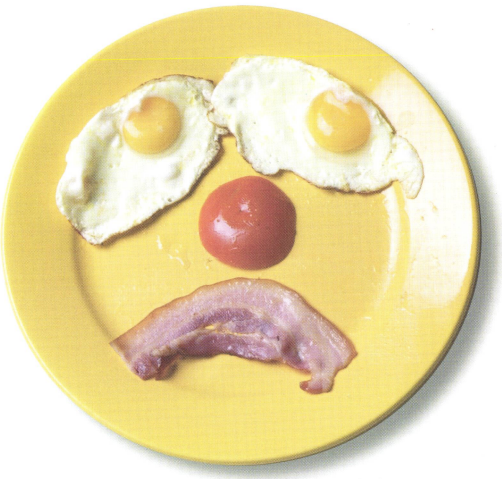
Please Mr Postman!

Those who habitually curse Australia Post may be interested in a survey recently conducted by Britain's Royal Mail.

According to the UK's *Which?*, the Post Office Users' National Council (POUNC) got Royal Mail to track 15,000 clearly addressed letters — and 17 never arrived. Given the mail carrier's weekly workload, POUNC estimates that this result suggests that one million letters go missing in the UK each week. While Royal Mail disputes this, it does acknowledge that it receives about 450,000 complaints a year regarding lost mail.

One can only assume it all ends up in the same place as all those socks mysteriously lost in the washing machine.

Fats ain't fats...



What is fat, where is it and should you care? Get your fat facts here.

THERE ARE TWO MAIN TYPES OF FAT — saturated and unsaturated. Each is worth a closer look, because fats ain't just fats.

Saturated fat

This group is pretty straightforward — it's generally found in animal foods, though coconut and palm oil contain it too. They're often used in the food industry because they're cheap and keep well.

Saturated fat is now pretty commonly known as a dietary bad guy. Too much of it contributes to health problems like heart disease because it raises the level of 'bad' cholesterol in your blood (see *Cholesterol*, page 8, for more).

The simple message on saturated fats is: cut down wherever you can. This means:

- Choosing only small amounts of lean meat and cutting off the visible fat.
- Choosing low-fat or reduced-fat dairy products.
- Switching to soft margarines (see *Trans fats*, page 8, for more on this) and unsaturated oils.
- Watching the saturated fat in processed foods — especially things like cakes, pastries and biscuits that rely on the hardness of saturated fats to get the right texture for baking. Don't be fooled by the words 'vegetable fat' on labels — it could mean palm or coconut fat, or 'hardened' fat, which is rich in harmful trans fats (see page 8).
- Many fast foods, especially deep-fried, contain saturated fat, too. Fast-food outlets often use palm oil and boast that it's cholesterol-free. It is — but don't be fooled into thinking it's healthy.

Unsaturated fat

There are many types of unsaturated fat — some good, some not so good. The main ones are monounsaturated, polyunsaturated and trans fat.

Monounsaturated fats

This type of fat has become famous because of its association with Mediterranean diets. It's found in olive and canola oil as well as avocadoes and many types of nut (for example, macadamias, cashews and almonds).

Monos can reduce heart disease risk because they lower the level of 'bad' cholesterol in your blood when used instead of saturated fat.

IN BRIEF

- Saturated fat is the dietary bad guy, but the body treats some unsaturated fats (called trans fats) much the same.
- A mix of monounsaturated and polyunsaturated fat is the best thing to swap to when you cut down on saturated fat.
- It's important to get a good balance of two types of polyunsaturated fat, called omega-6 and omega-3.
- Plant sterols now added to some margarines can reduce your cholesterol.
- Too much fat is not only a problem for your heart — it's also linked to some cancers.

OMEGA BALANCING

To help improve your omega balance:

- Consider swapping from polyunsaturated oils and spreads like sunflower or safflower to canola or flaxseed oil and canola-based spreads.
- Increase the amount of fish you eat: it doesn't matter whether it's fresh or canned. Oily fish like salmon, tuna and sardines are good choices, but all fish has some omega-3s.
- Think about how you can add other foods for good omega balance to your diet: omega-3 eggs, linseed or omega-3 breads, some nuts (like walnuts or pecans).

Polyunsaturated fats

These are mainly found in plant foods — popular oils such as sunflower and safflower are mainly polyunsaturated, as are most soft margarines. Nuts such as peanuts, walnuts, hazelnuts and brazils are another good source.

Polys are good for getting your blood cholesterol to fall — much better than monounsaturated fats — but unlike monos they reduce both the bad *and* good cholesterol in your blood. For many years, eating more polys was the catch-cry of nutritionists, but it's turned out not to be that simple — monos are also good, and it's not just a case of all polys being equal.

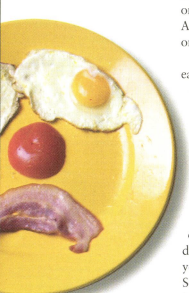
Omega-3 and omega-6 fats are types of polyunsaturates that are essential for our health. They're a bit like vitamins: your body can't make them so you have to eat them.

Most people get plenty of omega-6 polys — most common polyunsaturated vegetable oils and margarines, such as sunflower and safflower, are full of them. But omega-3s are harder to come by. They're found only in some oils — for example, canola, flaxseed (linseed) and walnut — and in fish, especially oily fish.

So getting enough omega-3s can be a challenge — one that's compounded by the fact that they compete with omega-6s in the body, so what you really need is a good balance between the two. This omega balance is usually way out: the average Australian eats about 15 times more omega-6s than omega-3s, instead of only around five times more.

Improving your omega balance has been made easier with the advent of canola-based oils and spreads: these mean fewer omega-6s as well as more omega-3s, and many people find it easier than dramatically increasing the amount of fish they eat.

What are the health effects of your omega balance? Omega-6s can reduce your blood cholesterol, but overdoing them at the expense of omega-3s can create other health problems. Some experts consider getting the balance right can influence diseases like arthritis, asthma and diabetes, for example. Omega-3s are also good for your heart and they can help lower blood pressure. See *Omega balancing*, above left, for more on this balancing act.



Trans fats

These are unsaturated fats that act like saturated fats in your body. They're mainly formed when vegetable oils are 'hardened' to make margarine. In general, the harder the margarine, the more saturated and trans fat it contains. Trans fats are also present in small amounts in beef, lamb, butter and other dairy products.

Other fatty issues

Plant sterols

New margarines like **FLORA pro.active** and **MEADOWLEA logical** contain ingredients called plant sterols that have been shown to reduce blood cholesterol levels by around 10% whether or not you're on a low-fat, low-cholesterol diet. This may benefit people with high cholesterol levels as part of their overall cholesterol-lowering diet.

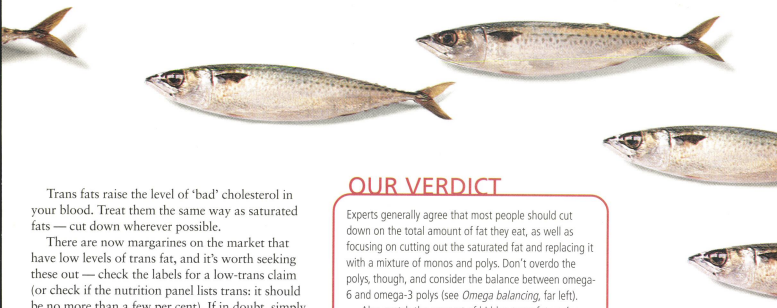
Unfortunately, the plant sterols also reduce the levels of some important substances in the body — such as beta-carotene — although there's scientific debate about how to measure the reduction, how big it is and how important it is.

On top of this, you have to keep using the margarines to keep the effect going — and they're not cheap: around four times as much as many ordinary margarines. For the amount you need to use (25 g — enough for four slices of bread) it works out at around 40 cents a day.

The most important thing to note is that not everyone needs them: if your cholesterol isn't too high, you don't need to worry about reducing it, so don't waste your money. If you *are* going to try them, and you're also trying to get your omega fats into a better balance (see *Omega balancing*, above left), it's worth noting that **MEADOWLEA logical** is based on canola.

Cholesterol

Cholesterol is a fatty substance made by the bodies of both people and animals — mostly by the liver. Your body needs



Trans fats raise the level of 'bad' cholesterol in your blood. Treat them the same way as saturated fats — cut down wherever possible.

There are now margarines on the market that have low levels of trans fat, and it's worth seeking these out — check the labels for a low-trans claim (or check if the nutrition panel lists trans: it should be no more than a few per cent). If in doubt, simply go for the softer brands of margarine. But you also need to watch the amount you get from processed foods, which may use hardened vegetable oils — for example, biscuits, pastries and cakes. ❑

OUR VERDICT

Experts generally agree that most people should cut down on the total amount of fat they eat, as well as focusing on cutting out the saturated fat and replacing it with a mixture of monos and polys. Don't overdo the polys, though, and consider the balance between omega-6 and omega-3 polys (see *Omega balancing*, far left).

Also, watch the amount of hidden trans fat you're getting: the body counts it as saturated and it can undo the good work you do in cutting down on saturates (see *Trans fats*, left).

cholesterol to use in various cell structures and to turn into other important chemicals it needs, such as some hormones, vitamin D and bile acids (essential for digestion).

If your body produces more cholesterol than it needs, your blood cholesterol rises and fatty deposits form in your arteries, causing heart disease.

Most of the cholesterol in your body is made by it; only about one quarter comes from food. However, the food you eat — in particular the amount and type of fat — influences the amount of cholesterol that circulates in your blood.

Good vs evil

The issue of blood cholesterol is confusing because although there's only one type of cholesterol, it's attached to different carriers, called lipoproteins. (Cholesterol and other fats can't dissolve in the blood on their own.) There are two kinds to be concerned with: low-density lipoprotein (LDL) and high-density lipoprotein (HDL).

■ **'Bad' or LDL cholesterol.** This is the cholesterol that can be dumped in your arteries — the more you have, the greater your risk of heart disease.

■ **'Good' or HDL cholesterol.** This protects you against heart disease. HDL picks up cholesterol from your artery walls and returns it to the liver to be used for other purposes.

That's why fats like monounsaturates are important: they influence your body to make less bad cholesterol, without making less good cholesterol as well.

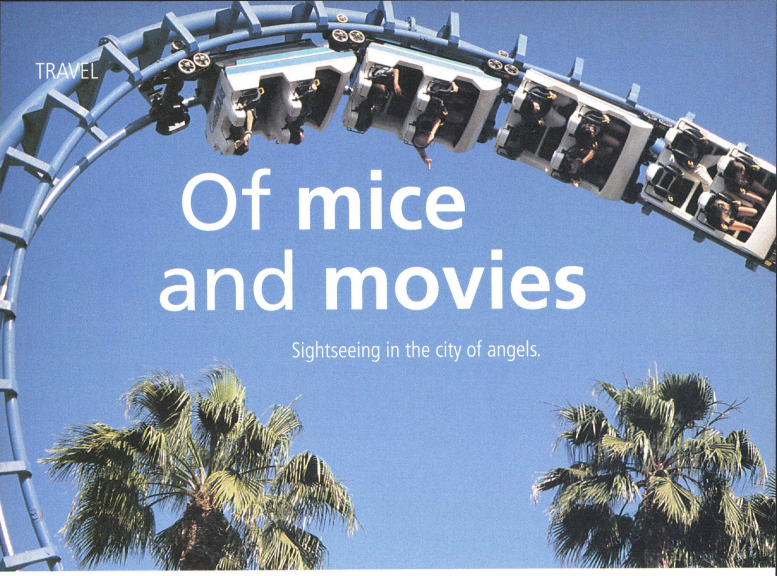
So a simple measure of the total cholesterol in your blood doesn't tell you much. What you and your doctor need to know is what kind of balance you have between HDL and LDL — the good and bad. Is more being picked up than dropped off, or vice versa?

If you need to reduce your cholesterol levels, these spreads can help, as they contain plant sterols (see left for more).

FAT AND CANCER

■ Too much fat in your diet — no matter what kind — has been linked to cancer of the bowel and prostate. The evidence of the possible link to breast cancer is still being debated.

■ Extra-virgin olive oil is high in antioxidants (known as polyphenols) and antioxidants can help prevent heart disease and cancer. Look out for our upcoming article on olive oil, with a taste test of extra-virgin olive oils by an expert panel.



Of mice and movies

Sightseeing in the city of angels.

HERE'S THE LONG AND THE SHORT of it: El Pueblo de la Reina de los Angeles, the town of the Queen of the Angels, is the proper name for LA.

Outside art museums you won't see many angels, but this is the centre of the world for make-believe. Along with our New Zealand sister magazine, *Consumer*, we sent two researchers to Los Angeles to uncover ways you can make the most of your holiday time and money.

The busiest kingdom of them all

Disneyland

This is the number-one stop. We couldn't imagine a family visit that didn't include a photograph with Mickey Mouse or Goofy.

Disneyland is polished shinier than anywhere else and so packed with things to do that many families spend at least a couple of days here.

It's packed with people too. So how do you minimise the time sweltering in a queue?

- Go early. Although we still waited 30 minutes for the Indiana Jones ride early in the day, the queues double by early afternoon.
- If you're planning several days there, buy a multiple-day pass that includes early entry on one day. Not everything is open, but crowds are smaller.
- Use the FASTPASS kiosks at the biggest rides: punch your ticket in and you'll get a pass for the ride during a specific hour later in the day, reached through a much shorter queue.
- Avoid weekends and public holidays.
- Go on a rainy day. It's still great.
- Get a stamp on your hand when you leave late in the afternoon. Go back to see the evening fireworks — and Tinkerbell's flight over the castle.

As with most theme parks, one whopping entry fee lets you enjoy all the rides as often as you like. One-day entry: Adults 10 and over (!) $69.50; kids three to nine, $52.50; over 65s, $66. Strollers and wheelchairs cost $12 to hire.

Hotdogs in the happiest kingdom are $7, bananas $2 and large soft drinks $4. To save money, take your own snacks. There are clean drinking fountains, however, which we used.

Three-day admission passes (adults $167.50; kids three to nine, $127) can provide good savings, but think twice about a five-day pass: several travellers told us they found it hard to use the last two days.

Don't try this after lunch: one of the Knott's Berry Farm thrill rides.

Knott's Berry Farm

The other big Anaheim attraction, this doesn't quite have the gloss of Disney and as a result has a more down-to-earth charm. It has a western theme with thrill rides including the recently opened Perilous Plunge, where 24-passenger boats roar down a water chute at 75 degrees: just 15 degrees off vertical!

Adults 12 and over, $64.50; kids three to 11, $47.50; over 65s, $47.50. It could make a full day, but you can get in after 4 pm for just $28.50 (all ages) and it's open late.

Universal Studios

This is easily a full day's outing of thrill rides and shows. Get there at opening time, because by early afternoon queues for popular rides can reach an hour.

The latest ride is *Jurassic Park* (be sure to buy the $1 poncho on offer and wear it), while other shows and rides are based on *Terminator 2*, *Backdraft*, *ET*, *Back to the Future*, *Waterworld* and other movies. The backlot tram tour takes you past movie sets with thrills along the way.

Wandering on foot, you could bump into Charlie Chaplin, Marilyn Monroe or Xena lookalikes.

As with most theme parks, there are minimum heights required on many rides and the more exciting ones are not recommended for pregnant women and people with back problems or heart ailments. Adults 12 and over, $69.50; kids three to 11, $52.50; over 65s, $61. Stroller and wheelchair hire $8.50.

City of art

If you prefer Renoir to rollercoasters, there are hundreds of galleries and museums to choose from.

- Art HQ is the **J Paul Getty Centre** high on a posh Brentwood hilltop. Entry is free: it's your chance to enjoy the spoils of one of the world's biggest oil fortunes.

Apart from the site and the beautiful stonework (a dozen ships ferried the travertine limestone from Rome), it's the variety of art which amazes, from jewels and marbles from the ancient world to impressionist oils. You'll find a van Gogh *Irises* and Renaissance masterpieces such as Mantegna's *Adoration of the Magi*.

Arrive at opening time: you'll spend the whole day here. Parking costs $8.50 and requires advance booking, but buses stop just outside. The Getty is closed Mondays and major public holidays.

- The **Los Angeles County Museum of Art** (5905 Wilshire Boulevard) contains 15,000 works ranging from ancient Egyptian art to the paintings of modern Americans like Georgia O'Keefe. Adults $12; kids six to 17, $1.50; students 18+ and over 65s, $8.50. Closed Wednesdays and some holidays.

As with all attractions, the café prices are steep. A tuna sandwich here cost us $11, while a very similar sandwich at a corner store only cost $3.50.

- If you want to see LACMA but not everyone in the party is keen, there's a good option for the rest next door: **La Brea Tar Pits** (5801 Wilshire Boulevard).

This area is one of the richest deposits of Ice Age animal remains in the world. You can stare into the gooey pit or visit the museum (adults $10; kids five to 12, $4) to find reconstructed skeletons of giant sloths, mammoths, sabre-toothed tigers and lions that roamed here up to 40,000 years ago.

- **Pasadena** was the biggest discovery of our research trip. This leafy town is a 20-minute drive north-east from downtown LA. Just walking past the fabulous homes and gardens is an eye-opener, but there are also two stunning museums.

IT HELPS TO KNOW:

- Los Angeles is about 13 hours' flying time from Australia.
- You don't need a visa if you have an Australian passport.
- There's little rain April to October, high temperatures August and September.
- Planning pays off. Read a guidebook before you go.
- Tipping is a horrible necessity. Add 15% to restaurant bills, and $1 for valet parking, hotel room maids and so on. Keep plenty of $1 bills handy.
- Advertised prices often don't include sales tax. Expect that drink stickered as $1.39 to cost $1.50. Tax is 8.25% in LA County, 7.75% in Orange County (which includes Disneyland).
- Many museums and galleries are closed one day a week and major holidays.

AN LA TASTER

If you're stuck at Los Angeles airport with five or more daytime hours between flights, take the free shuttle from outside the terminal to Carpark C and get off at the transit centre (a little bus station).

Catch a blue Santa Monica bus, No 3, to Santa Monica. Ask the driver to tell you when you're closest to the pier. The trip takes around 40 minutes and costs $1.

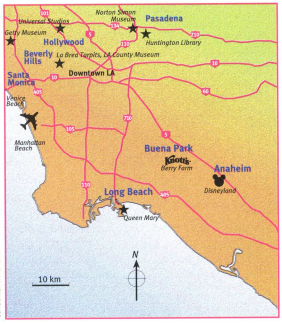
There you can walk on the pier, ogle the action, wiggle your toes in the sand or browse the shops. Make sure you allow cash and time for your return to the airport.

LA attractions can be a long way apart — for example, Disneyland is 71 km from Universal Studios. See *Where to stay*, below, for suggestions on beating the distances.

On display at **The Huntington Library and Gardens** during our visit was a *Gutenberg Bible*, the first printed book, from 1455; the first manuscript of Chaucer's *Canterbury Tales*, from around 1400; and first printings of Shakespeare's plays.

You can stroll through a railroad magnate's original mansion and 52 hectares of beautiful gardens, including an Australian garden. Adults $14.50; students 12+, $10.50; over 65s, $13.50. Closed Mondays and major holidays.

The Norton Simon Museum is smaller than the Getty, yet its works by several artists (Toulouse-Lautrec, Degas) are the equal or better of those on



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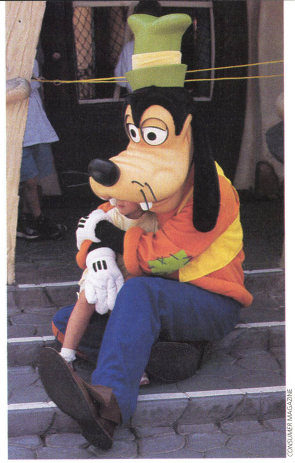


CONSUMER MAGAZINE

You too could have your photo taken with Goofy at Disneyland.

view in the Getty and you aren't elbowing big crowds. The van Gogh *Portrait of a peasant* and the Picasso *Woman with a book* are stunning. Adults $10; kids under 18 free; over 65s, $5. Closed Tuesdays.

City of shopping

Don't expect bargains in LA. Some prices don't look bad until you add the sales tax and convert to Australian dollars. What you do get is an overwhelming selection and a potentially fascinating sightseeing experience.

Most shops don't open till 10 or occasionally 11 in the morning, but they're open late most days except Sunday.

Just a few of your options include:

- **Melrose Avenue** (between La Brea and Fairfax) for trendy fashions and good but expensive cafés and restaurants.
- From Melrose Avenue you can walk to the **Beverly Centre**'s posh shops plus Macy's and Bloomingdale's department stores.
- **Century City** (you can catch a bus there) is a pleasant outdoor mall of 140 big-label stores such as Tiffany and Hugo Boss, but also has some more affordable places and a food market.
- At Anaheim, **The Block at Orange** allows a break from the theme parks. There is an Oxygen Bar where for $10 you can have five minutes of

Where to stay

Major attractions can be a long way apart, so choosing the right area to stay is important (see the map above). Your options are:

- **Anaheim/Buena Park**, an hour's drive south of the airport, is the best base for a Disneyland holiday. But don't go there for museums, good shopping or dining.
- **Santa Monica** is great for beachfront strolls and it's an easy bus/drive to Hollywood, Beverly Hills or the Getty Centre. Shops and restaurants are plentiful.
- **Hollywood/Beverly Hills** is the ideal base for Hollywood attractions, shopping and dining, galleries and museums. The Getty and Universal Studios aren't too far away. It's a long way to Disneyland.
- **Los Angeles Airport (LAX)** is good for early or late arrivals, but getting to Hollywood or Disneyland can take an hour, and Santa Monica 30 minutes, in busy traffic.

If you're staying for at least five nights, consider spending the first few nights in one spot (say Anaheim/Buena Park) then moving further north for the last few days.

You have a vast range of accommodation options from luxury hotels to youth hostels.

oxygen to "merge the mind, body and spirit". Off 5th, an outlet store for the famous Saks Fifth Avenue shop, is worth a browse.

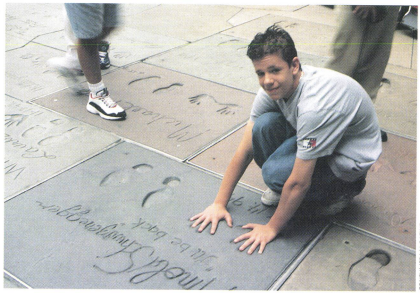
- Most visitors to **Rodeo Drive** just nose the glass of Gucci, Versace and the other designer boutiques. Eating here could part you from a week's wages: an ounce of beluga caviar costs $110.
- For name-brand clothes and shoes you can afford (Hugo Boss, Guess, Florsheim) head to **Ontario Mills**, a complex of 200 factory shops 30 minutes' drive north-east of Disneyland.

City of cheap thrills

If your credit card is red-hot and begging for a break, LA has some great lower-cost things to do.

- **Hollywood** was for many years a downmarket dump, but it's being renovated. On Hollywood Boulevard you can walk in the footsteps of the stars on the pavement outside Mann's Chinese Theatre. Along the pavement you'll find star plaques bearing names from Marilyn Monroe to Woody Woodpecker.

At Hollywood Movie Posters a huge copy of Russell Crowe as the Gladiator costs $25.50, although a rare classic movie poster will set you back hundreds.



CONSUMER MAGAZINE

Walk in the footsteps (or handprints) of the stars outside Mann's Chinese Theatre on Hollywood Boulevard.

You may get the chance to be part of a TV audience: we were offered tickets and shuttle transport to Roseanne's show.

For $32 to $48 you can take tours past the homes of stars past and present.

A visitors centre at 6541 Hollywood Boulevard (Mon–Sat 9–5) provides general information about LA and good information on buses to and from the Hollywood area.

How to get around

There's no easy way to do it.

- **Rental cars** offer independence and flexibility, but driving requires patience and confidence. Apart from driving on the right there are other differences: if you stop first and the way is clear, for example, you can turn right even if the traffic light is red.

We strongly recommend you buy full liability and collision insurance and budget plenty for parking costs. Parking lots near attractions typically charge $7 to $13. Valet parking near restaurants, including a tip, is $5 to $8.50. Some hotels charge for off-street parking.

- **Public buses** are slow but cheap and will take you most places. We felt safe using them, though we wouldn't recommend them for women alone after dark.

MTA buses cover most of the city, tickets cost from $2.50, and drivers are helpful. The blue Santa Monica buses charge $1.

What makes the system work for visitors is a free information service. Call 1800 COMMUTE, tell them where you want to start, where you want to go to and when, and they'll give you bus numbers, departure times and transfer details over the phone. We found this reliable the dozen times we used it.

The big drawback to bus travel is the time: crossing the city can easily take an hour or more. Drivers don't give change, so have plenty with you.

- A **light rail system**, part of it underground, has limited routes but is being extended. It's clean and cheap (from $2.50). The ticket machines take notes or coins and give change.
- **Shuttles** are ideal between the airport and your hotel. A shuttle to Disneyland-area hotels costs $24 one way per person, compared to over $80 for a taxi.
- **Taxis** are expensive: even 10-minute trips cost us $17 to $20. You're expected to leave a tip on top of the fare, and some cabbies won't give you more than US$5 change. A few take credit cards.

Some travellers told us they'd struck a deal with a taxi driver for two hours of driving for a fixed, pre-agreed rate: a good option if time is limited.

- **Walking** won't take you very far, simply because the city is so enormous and summer temperatures are high. But we were happy to do it during the day. It's safe in the parts of the city you'll want to go, but lonely: few Angelinos walk anywhere.

The best map is the ring-bound *Thomas Guide* for $28.50. The *Rockwell Los Angeles and Hollywood* map for $8.50 is a fine cheaper option.

PRICES

Prices are in Australian dollars, rounded to 50 cents, at the exchange rate of AU$1 = US 59 cents. Prices are subject to change.

CONSUMER MAGAZINE

Santa Monica beach: a great place to cool off under the watchful eye of its famous lifeguards.

■ **Santa Monica**'s great sugar-sand beach has water that's clean enough to swim in, although paper cups surf the incoming waves. For $16.50 you can hire a beach umbrella for three hours. A stroller or child's bike costs $6 per hour to hire, inline skates or adult bikes go from $8.50 per hour. You can cycle or skate south to Manhattan Beach or cycle up into Topanga State Park in the Santa Monica Hills. Blazing Saddles on the Santa Monica pier offers maps for different rides. Tandems and child carts are also available.

There are shops, restaurants and an information booth in the streets behind the pier.

■ **Venice Beach** is a stroll south from the Santa Monica pier. Tattoo artists, tarot readers and t-shirt sellers throng the area at weekends, down as far as Muscle Beach (an outdoor gym of posing beefcake).

■ **El Pueblo de los Angeles**, opposite Union Station in the downtown district, provides the background to LA's Spanish-speaking roots. It houses the city's oldest home, an adobe cottage built around 1818. Entry is free. The street outside the cottage is thick with inexpensive Mexican trinket stalls. Not a must-see, but a cheap and colourful half-day.

Forget the other downtown attractions, like the much-hyped Farmers Market — there are equal or better food markets in Sydney and Melbourne.

You don't travel to LA for the food. Burgers, pizza and Mexican food are the order of the day. 'Regular' is usually the smallest serving, 'entrees' are what we call mains and if you order a salad it'll be served first. Restaurant servings can sometimes be enormous and sandwiches come with meat piled high.

Beyond the city

You won't exhaust LA's attractions during your visit, but you may feel you'd like a break away from the city. Options include:

■ **Long Beach** and the liner *Queen Mary*. Onboard the ship (adults $25.50; kids four to 11, $15) you can see the bridge, engine room and a few passenger and public rooms with original furnishings. It's still got some atmosphere. There's a Russian submarine next door that you can visit too.

■ **Palm Springs**, a desert resort town about two hours' drive east.

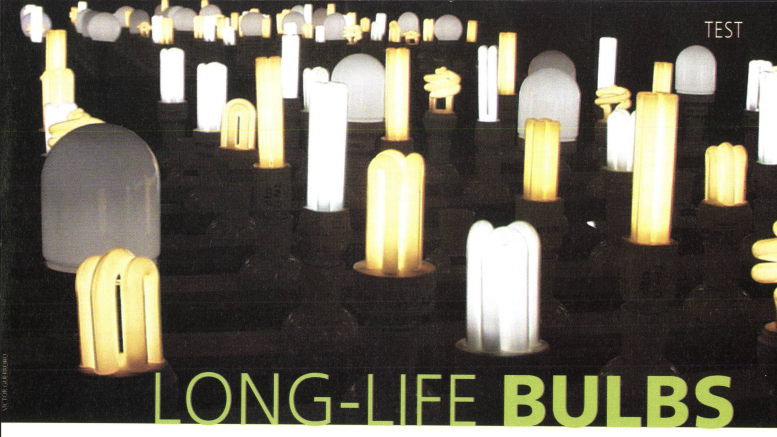
■ **San Diego**, 145 km south of Disneyland. The biggest-draw attraction here is **SeaWorld** adventure park, which now includes a number of non-animal attractions as well as the dolphins and orcas it's famous for.

■ **Tijuana**, the Mexican tourist town, can be done in a day trip from LA.

Whether it's Disneyland or Hollywood or the Getty that draws you to Los Angeles, LA is also full of other kinds of lives. Just before we left, we came across that American icon of innocence: a little boy and girl at their front gate selling home-made lemonade for 25 cents. As a parting taste of the city of the angels, we drank it up. ❑

CONSUMER MAGAZINE

Waterworld: one of the thrills and shows at Universal Studios.



VICTOR GRIGAS

LONG-LIFE BULBS

— which really deserve the name?

Our test has now been going for 7000 hours. While some models are still going strong, others have all but given up.

THE LONG-LIFE BULBS IN OUR TEST HAVE endured 7000 hours of cycling: 165 minutes 'on' and 15 minutes 'off'. It would take six or seven incandescent bulbs to shine for that amount of time, yet some of the long-life models are only about halfway through their expected life of 12,000 or even 15,000 hours. Unfortunately, though, not all models have survived as long as they're supposed to.

Survival rates

We started the test with 10 samples of each model. Some models haven't had a single failure yet (see the table, page 19). Others have had a few casualties, and some have given up the race altogether:

- After 3400 hours, the **CONDOR Daylight CESD18** had already lost seven samples. After about 5000 hours, all 10 had died. By now, the smaller 12 W samples have all but caught up with their larger siblings — only one is still alive.

While all samples lasted at least long enough to recover their (relatively low) purchase price, the vast majority didn't meet their (also relatively low) claimed life expectancy of 6000 hours. That's not good enough, and CHOICE recommends you avoid these models.

One reason for their early failure may be that they switch on without preheating the electrodes (see note 3, page 19).

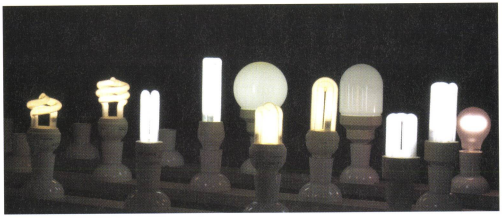
- After 5000 hours, six of the **NELSON ELT-C 20 W** bulbs had failed; by now it's nine. However, the similar model with a spherical cover (**ELT-S 20 W**) hasn't had any failures to date. According to Nelson, the problem was a faulty electronic part. It says it will establish more stringent guidelines for component suppliers to avoid the problem in future.
- Most of the seven failed **PANA VISION 11 W** samples did so between about 5500 and 6500 hours. Considering their claimed life expectancy of 10,000 hours, this isn't a satisfactory result. However, according to the Australian distributor (Compact Lamps Australia), our test samples may have come from a faulty batch that's been recalled.

If you have a **PANA VISION 11 W** or **20 W** bulb with the batch code J9, F9 or A9 (printed on the white lamp ballast), you can get it replaced by returning it to the retailer you bought it from.

- All the **MIRABELLA** models in the test have lost a few samples. This may be due to their switching on without preheating the electrodes (see note 3, page 19).

IN BRIEF

- Models that last as long as they're claimed to will save you money (see Figure 1, page 17).
- Few models are as bright as their manufacturers claim — particularly the 18–21 W ones claimed to replace 100 W incandescents. What's more, they become dimmer over time (see the table and note 5, page 19).
- The GE bulbs tested are the ones to buy, based on their zero failure rate and good light output. However, the LUXMAN and some of the OSRAM models in the batch that's 2000 hours behind are also going strong.



The photo shows four pairs of different bulb shapes (the higher-wattage bulb is larger than the lower-wattage one), and two types of covered lamps. Here's which model comes in which shape, from left to right:

- **Spiral-shaped** pair: this shape is unique to the Mirabella Spiral models.
- Pair with **two parallel U-shaped tubes**: the GE FLE11DEX, both Nelson ELMs, the Luxman and the two low-wattage Osrams come in this shape.
- **Spherical cover**: only the Nelson ELT-S models come in this shape (inside are basic 12 W and 20 W ELT bulbs).
- Pair with **three parallel U-shaped tubes**: this shape is unique to the Mirabella U-shaped models.
- **Cylindrical cover**: only the Nelson ELT-C models come in this shape (inside are basic 12 W and 20 W ELT bulbs).
- Pair with **three U-shaped tubes forming a triangle**: all the other tested models have this shape.
- **Incandescent bulb**.

All the tested models are available with Edison screw and bayonet fittings.

Break-even time

Long-life bulbs use only about 20–25% of the energy of their corresponding incandescent bulbs — which is why a 20 W bulb theoretically replaces a 100 W one. So using them benefits the environment right away.

Over 8000 hours, a 20 W long-life bulb produces about 600 kg less CO_2 than a 100 W incandescent bulb (if the electricity is generated in a coal-burning power plant).

But what about the cost? You can get a brand-name **incandescent** light bulb for less than a dollar that's likely to last for around 1000 hours. The electricity costs during that time are much higher than the purchase price.

Long-life bulbs, on the other hand, cost on average about $20. But because they use little energy, even over a life of, say, 8000 hours, the electricity costs are small compared to the purchase price.

How long do they take to break even with incandescent bulbs? This depends on the wattage. We've made a calculation for two examples: a 15 W long-life bulb replacing a 60 W incandescent, and a 23 W long-life bulb replacing a 100 W bulb — see Figure 1, right.

Let there be light

Lighting a room can be as simple as popping a bulb into a Chinese paper shade suspended from the centre of the ceiling. Or you can make an art of it, employing the services of a lighting designer and creating dramatic effects, accentuations and moods.

Which fixture?

If you've seen the packed ceiling of a lighting shop recently, you know there's a huge range of fixtures available: from unobtrusive to dramatic, antique to ultramodern, a few dollars to a few hundred.

Which fixtures are right for you, of course, depends on your taste and budget. If you want to use long-life bulbs, you'll need to take this into account. Most fixtures will fit into one of three general categories, according to the type of lighting they provide.

PHILIPS LIGHTING

You can use an accent light to highlight a range of things

- **General or ambient**: These illuminate the whole or at least large parts of the room — for example, with ceiling fixtures, or indirectly with upright floor lamps. If you use them with a dimmer, you can create different moods — from bright and practical to cosy and romantic.
- **Specific task**: In most rooms you need light sources for particular tasks, such as a reading lamp in the living room, a lamp illuminating the workbench and cooktop in the kitchen, or a lamp providing shadow-free light around the bathroom mirror. This can be achieved, for example, by desk lamps and spotlights.
- **Accent**: This is used for decorative or dramatic effects — for example, to spotlight a painting, your favourite *objet d'art* or a tree in your garden.

Which bulb?

Some fixtures don't give you much choice of which type of light bulb to use. For example, you won't get the desired spotlight effect without a reflective narrow-beam globe. And, of course, a fluorescent tube fitting requires a fluorescent tube.

However, many fixtures with Edison screw or bayonet fitting give you more flexibility.

Most light bulbs used for domestic purposes work on one of two principles: incandescent or fluorescent.

With incandescent bulbs, an electric current is sent through a metal wire, heating it white-hot so it gives off light. It's cheap to buy but not very efficient — most of the electrical energy is converted into heat rather than light.

In fluorescent bulbs, an electric current is sent through a mixture of gases in a tube. The gases emit ultraviolet radiation, which causes a phosphor coating on the inside of the tube to glow (fluoresce). The mixture of phosphor determines how close the glow is to natural light. This process uses only about 20% of the energy consumed by incandescent bulbs to produce the same amount of light.

There are several different bulb types within these two categories.

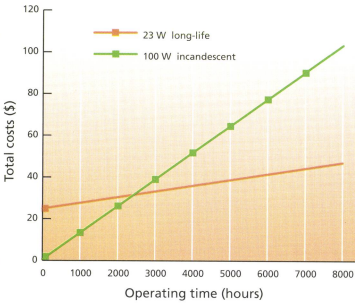
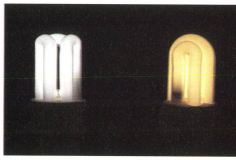


Figure 1. One 23 W long-life bulb costing $25 (which is on the high side) and replacing eight 100 W incandescent bulbs can pay for itself after about 2400 hours (assuming an electricity price of 12 cents per kWh). If it's used in a living room and switched on for about 1500 hours a year, this will take about 1.5 years. After that, you'll start making money — $55 after 8000 hours. We did the same calculation for a 15 W long-life bulb replacing eight 60 W ordinary ones: the breakeven time is about 3900 hours (or 2.5 years), and after 8000 hours you'll have saved $25.

How to use long-lifers



Most models come in 'warm white' (right) and 'natural' (left). See note 2, page 19, for details.

- You get the most benefit using long-life bulbs in areas where they're switched on for long periods of time — for example, in living areas or the hallway. Some manufacturers say frequent on/off switching reduces the bulbs' life.
- Most models don't switch on right away. Some take more than two seconds, so they're not suitable for areas where you need immediate light, such as a staircase (see note 3, page 19).
- Most long-life bulbs take a while until they reach full brightness (see note 4, page 19). This can be annoying in areas where they're usually switched on for only a few minutes at a time, such as in a bathroom, so in those rooms go for a model that warms to its task more quickly.
- If you use a long-life bulb in an enclosed or semi-enclosed light fitting, heat may build up inside it and reduce the bulb life. However, some models (such as the NELSON Compact ELM 20 W in this test) can adjust to higher temperatures and are OK to use in enclosed fittings. Ask for advice in your lighting shop.
- You can't use long-life bulbs with a dimmer.
- Moisture may reduce their lifespan, and low temperatures their light output.

INCANDESCENT

Tungsten filament

These are the 'standard' bulbs — by far the most popular and least expensive to buy, but also the least efficient type. Their life expectancy ranges from about 1000 hours (normal models) to about 2500 hours ('long-life' models). They dim over time because tungsten evaporates from the filament and forms a black deposit on the bulb wall.

They come in a range of shapes (for example, globe or candle) and finishes (clear, pearl, coloured).

Tungsten halogen

These contain small quantities of halogens (such as bromine) that prevent the evaporated tungsten from depositing on the bulb wall. So they don't dim over time.

They're about 30% more energy-efficient than normal incandescents, emit a brighter, whiter light and last longer (usually 2000–5000 hours). But they're also several times more expensive.

Available for both normal and low voltage, halogen bulbs are often used for task and accent lighting. Low-voltage bulbs require a transformer to convert the normal 240 V current, and aren't straightforward to install: for example, the transformer has to be mounted vibration-free to avoid humming, and long leads to the bulbs can cause radio interference. Ask your retailer or electrician for advice.

Halogen bulbs emit UV radiation, which can potentially bleach objects and give you 'sunburn' if you sit very close to it for a long time. So they either have a shield or are made from special glass that filters the UV radiation.

FLUORESCENT

Fluorescent tubes

These are very efficient (they use up to nine times less electricity to achieve the same light output as normal incandescents) and have a claimed life of usually 8000–16,000 hours (a few models even claim 20,000 hours).

However, they're obviously not always an option aesthetically and the choice of fixture is limited.

PHILIPS LIGHTING.

You need proper focused light for working at a desk.

Compact fluorescents

These are more commonly called long-life bulbs. Modern models are much smaller and lighter than early ones, and come in different designs, so they can replace normal incandescents for most purposes. However, they can't be used with dimmers or motion sensors.

They're four to five times more efficient than normal incandescent globes (so you can replace, say, a 60 W incandescent with a 15 W long-life bulb), and have a claimed life expectancy of up to 15,000 hours.

Over their lives they save enough electricity to easily recover their high purchase price (usually $15 to $25) and leave you better off financially (see Figure 1, above).

Long-life bulbs

1 1 2 3 4 5

Equivalent incandescer

Brand / model (in order of failures after 7000 hours)	Manufacturer / distributor	Origin	Target price ($)*	Length (mm)	Diameter (mm)	Available colour temperatures (K)	Switch-on delay (sec)	Warm-up time (sec)	Claimed	After 100 hours of operation
GE FLE11DBX (11 W)	GE	Hungary	17.30	132	37	2700, 4000	1.1	60	60	55
GE FLE20TBX (20 W)	GE	Hungary	17.30	143	40	2700, 4000	1.0	96	100	90
NELSON ELT 12 W Compact	Nelson Lamps	China	20.00 **(B)**	122	51	3000, 5000	3.9	113	60	55
NELSON ELT-C 12 W	Nelson Lamps	China	24.95 **(B)**	165	78	3000, 5000	2.5	67	60	37 **(D)**
NELSON ELT-S 12 W	Nelson Lamps	China	24.90 **(B)**	165	100	3000, 5000	3.3	79	60	39 **(D)**
NELSON ELT-S 20 W	Nelson Lamps	China	24.90 **(B)**	165	100	3000, 5000	3.7	69	100	61 **(D)**
NELSON ELM 20 W Compact	Nelson Lamps	UAE	20.00 **(B)**	185	47	3000, 5000	0.4	35	100	77
NELSON ELM 11 W Mini Compact	Nelson Lamps	China	17.00 **(B)**	145	40	3000, 5000	2.4	92	60	57
MIRABELLA Elite 10 W Spiral	Mirabella	China	20.25 **(B)**	116	54	3500	0	57	50	46 **(E)**
MIRABELLA Elite 20 W Spiral	Mirabella	China	20.25 **(B)**	134	60	3500	0	43	100	70 **(E)**
MIRABELLA U-shaped EE10 (10 W)	Mirabella	China	15.40 **(B)**	130	54	3500	0	48	50	50 **(E)**
NELSON ELT 20 W Compact	Nelson Lamps	China	20.00 **(B)**	150	51	3000, 5000	3.2	63	100	80
MIRABELLA U-shaped EE20 (20 W)	Mirabella	China	15.40 **(B)**	154	54	3500	0	56	100	74 **(E)**
PANA VISION 11 W	Compact Lamps Aust.	Korea	24.50	139	38	2700 **(C)**, 6400	1.0	133	60	58
CONDOR Daylight CESD12 (12 W)	Philips	China	13.00	135	44	5000	0	77	60	56
CONDOR Daylight CESD18 (18 W)	Philips	China	13.00	158	44	5000	0	75	75	78
NELSON ELT-C 20 W	Nelson Lamps	China	24.95 **(B)**	165	78	3000, 5000	1.4	29	100	49 **(D)**
Brand / model (in order of failures after 5000 hours. These models were released after we started testing and are about 2000 hours behind.)										
LUXMAN 11 W **(A)**	Lights of Australia	China	12.00	143	43	2700, 4300	1.4	70	60	57
OSRAM Dulux EL Economy 12 W **(A)**	Osram	EU	21.20	138	45	2700	0	97	60	53
OSRAM Dulux EL Longlife 11 W **(A)**	Osram	EU	29.70	138	45	2700	0.7	82	60	62
OSRAM Dulux EL Longlife 20 W **(A)**	Osram	EU	29.70	154	52	2700	0.6	98	100	92
SYLVANIA Lynx Energy Saver 20 W **(A)**	Sylvania Lighting International	UAE	16.25	153	50	ns	0.3	37	100	80
OSRAM Dulux EL Economy 21 W **(A)**	Osram	EU	21.20	154	52	2700	0	94	100	95

* Prices shown are a good target to aim for, based on nationwide checks in July 2000.
ns Not stated.
(A) May be hard to find.
(B) We found a big price range — shop around.
(C) According to the manufacturer, this will change to 3100 K on new models.
(D) This model has a cover that dims the bulb considerably.
(E) According to the manufacturer, the light output has been improved on later models.
(F) Based on only one surviving sample.
(G) Not applicable — all samples failed earlier.
(H) Not applicable — this model was released after we started the test and is about 2000 hours behind.
(J) The test samples may have come from a faulty, recalled batch. See *Survival rates*, page 15, for details.

From dusk till dawn

The **NELSON ELD 23 W** is a relatively new long-life model with a twist: it's controlled by a photoelectric diode that switches it on automatically at dusk, and off again at dawn. So you could use it to light the entrance area of your house, or a room inside your home while you're on holidays (to make your home look lived in).

According to **NELSON**, it's available with both Edison screw and bayonet connections, and in warm white and natural colour temperatures. It's 172 mm long, has a diameter of 50 mm and weighs 165 grams. It's recommended retail price is $44.

It's supposed to last 10,000 hours and replace a 120 W incandescent bulb. However, the sample we measured had a light output (after 100 hours burn-in time) equivalent to a 93 W incandescent.

MICHELLE HAMINGTON

ight output (W)			6 Failure rate (out of 10 samples)	
After 3000 hours of operation	After 6500 hours of operation	Claimed life expectancy (hours)	After 3400 hrs	After 7000 hrs
49	48	12,000	0	0
85	83	12,000	0	0
47	43	8000	0	0
31	28	8000	0	0
33	30	8000	0	0
48	42	8000	0	0
62	55	8000	1	1
49	44	8000	1	1
34	30	10,000	1	2
45	38	10,000	1	3
37	36	8000	2	3
67	57	8000	0	3
50	44	8000	3	5
44	41	10,000	1	7 **(J)**
46	42 **(F)**	6000	1	9
61	**(G)**	6000	7	10
35	31 **(F)**	8000	0	10
				After 5000 hrs
51	**(H)**	10,000	0	0
46	**(H)**	8000	0	0
54	**(H)**	15,000	0	0
82	**(H)**	15,000	0	0
66	**(H)**	10,000	0	0
81	**(H)**	8000	0	4

1 Dimensions (length and diameter)

There are considerable differences, so check which models best suit your light fittings (also see the photo on page 16).

2 Colour temperature

By varying the phosphor lining of the bulbs, manufacturers can achieve a different composition of the bulb's light output. This is the 'colour temperature' of the bulb, expressed in Kelvins (K).

Bulbs that give a 'warm white' light are close to the light produced by ordinary incandescent bulbs. Their colour temperature is around 3000 K. Higher colour temperatures (around 5000 K) are closer to 'natural' light (see the photo, page 17). Some of the bulbs are available in both colour temperatures; for those that aren't, check you're buying a bulb that's the colour temperature you want. It's best to match the colour temperature of a long-life bulb to other types of bulbs you're using in the same room.

3 Switch-on delay

Most models take a while to switch on (some more than three seconds). This is because the electrodes preheat before the bulb actually switches on. So they're not suitable for areas where you need immediate light, such as a staircase. On the other hand, our German counterparts found that models that switch on immediately are likely to wear out more quickly. Our results seem to confirm this (see *Survival rates*, page 15).

4 Warm-up time

Most long-life bulbs in this test take between one and two minutes to reach 80% of their maximum brightness.

5 Light output

After 100, 3000 and 6500 operating hours, we measured the light output of the bulbs and used it to calculate the wattage of an equally bright incandescent bulb.

Few models are as bright as their manufacturers claim. While most of the 10–13 W long-life bulbs (claimed to replace 50–60 W ordinary bulbs) come fairly close, some of the 18–21 W ones claimed to replace 100 W incandescents are considerably out.

But what's more, the bulbs become dimmer over time. After 3000 hours, the brightness of some models had dropped by more than a third. However, the main dimming occurs in the first part of the bulb's life — the drop was much less dramatic between 3000 and 6500 hours.

While incandescent bulbs also dim over time, you replace them every 1000 hours or so with a bright new one. A long-life bulb that's lost considerable brightness will stay in the socket for many years. So with most models it may be a good idea to choose a higher wattage (say, replacing a 60 W incandescent with a 15 W long-life bulb). That's particularly the case if you want to use one of the models with a cover over the actual bulb, as they're comparatively dim to start with (see the photo, page 16).

Choosing a higher wattage will increase the break-even time, though. For example, using a 15 W long-life bulb instead of a 12 W one to replace a 60 W incandescent means you have to wait about 250 hours (or about two months) longer to break even.

6 Failure rate

We started our test with 10 samples of each model. The failure rates indicate whether they're on track to meet their claimed life expectancy, and whether they're likely to last long enough to at least recover their purchase price.

Note: Three **PHILIPS** models initially included in the test were all discontinued, and new models were released too late to be included in our test.

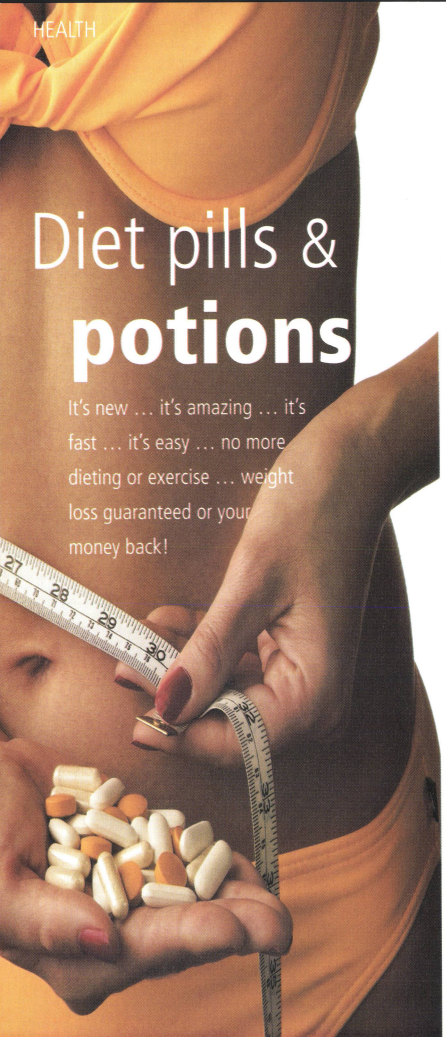
THE TEST

This test was made possible by funding from the Australian Greenhouse Office (AGO), the leading Commonwealth Government agency on greenhouse matters. CHOICE's published views, however, are independent of the AGO's.

We published survival rates after 3400 hours in the April 2000 issue. This article takes another look at which models are still going strong after 7000 hours — still only around halfway through the claimed life of some of the models.

Diet pills & potions

It's new … it's amazing … it's fast … it's easy … no more dieting or exercise … weight loss guaranteed or your money back!



IN BRIEF

- There's no magic way to lose weight: there's little evidence any of the over-the-counter diet pills or potions work. A few ingredients in them might help when included in your diet rather than taken as a pill, but even that's speculative. Don't waste your money.
- Despite that, there's no formal approval or testing process for the effectiveness of many of these products, and claims are based on little or no science.

UNFORTUNATELY (and somewhat predictably) any diet product that makes claims like those on the far left most likely doesn't work and the only thing that loses weight is your wallet. How do you spot the diet rip-offs?

Losing weight the safe and healthy way is a long, hard slog: eating differently and being more active. No wonder the idea of a diet pill that means there's no hard work is so tempting. And there's a lack of effective prescription medications your doctor can offer that'll help; and one, Xenical, that promises much for severely overweight people has only just become available in Australia.

Add to this the fact that there's no formal approval or testing process for many of these types of over-the-counter products and you can see why the number of diet pills and potions has skyrocketed.

With brand names like Optislim 2000, Fat Metaboliser, Beer Belly Buster and Exo'fat, they sound good, but how good is the evidence that they work? We looked at 25 popular ingredients in weight-loss products from pills to patches. The verdicts for each are shown in the profiles on the following pages.

Are you wasting your money?

The short answer is probably yes.

There's not much evidence that any of the ingredients looked at here is going to help you lose weight — and what evidence there is, is mostly of poor quality.

There's some support for capsaicin, caffeine and fibre, but only when they're eaten in foods, not as pills or potions — and even then, the evidence isn't that strong.

Overall, the evidence is shaky, but better studies might still show some benefits from some of the ingredients. It's not known, for example, how combinations of some of these things might work. Even if they did work, though, it's likely you'd have to keep taking them forever to maintain any effects.

The problem with these pills and potions is that their claims are not based on good science — for some, on no science at all. While this may not mean they should be off the market, they certainly shouldn't make or imply claims that can't be properly backed up.

Just because a product has been approved for sale, don't assume its effectiveness has been tested — the Therapeutic Goods Administration (TGA) checks all

products for safety, but only some products for effectiveness — those 'registered (R)' rather than 'listed (L)'. And although there's a Therapeutic Goods advertising code that says claims should be able to be substantiated and ads in the media should be approved before they're used, dodgy claims do slip through.

In fact, the system relies heavily on people making complaints after the event. Add to this clever wording by manufacturers — for example, "may assist weight loss* (*in conjunction with a calorie-controlled diet)" or "may be of benefit for assisting in the digestion and metabolism of fats" — and you have a situation where consumers need to be vigilant to avoid being duped.

CHOICE is taking this matter of diet pills and potions to the Therapeutic Goods Advertising Code Council (TGACC), and we'll keep you up to date with any progress, but in the meantime, save your money.

If you find a product that you think makes too-good-to-be-true claims without backing them up, you can complain to TGACC c/- Private Bag 938, North Sydney 2059; fax (02) 9460 2798; phone (02) 9460 2796.

PROFILES: THE MAGIC INGREDIENTS

Ingredient: Chromium picolinate

Where does it come from?
An organic form of the metal chromium. Trace amounts of chromium are needed by the body to metabolise carbohydrates and fats.
Examples of products that contain it:
Fingerprint Botanicals Chromaslim.
How is it claimed to work?
Makes you feel more satisfied after eating and helps your body to use more calories by generating heat.
How good is the evidence?
Most studies involving chromium picolinate have shown no effect in normal-weight people; and the two studies that have shown an effect have problems with their methodology. Two other studies of overweight people showed no more weight loss with a chromium picolinate supplement than from diet alone, or diet and exercise.
Risks:
It could build up in the body and may damage DNA. Kidney damage has also been reported from taking large amounts over a long period.
The verdict:
There's no good evidence it's any help.

Ingredient: L-carnitine

Where does it come from?
It's an amino acid found in meat and dairy products. Your liver can also make it from two other components of protein (the amino acids lysine and methionine).
Examples of products that contain it:
Nature's Own Dietary Fat Metaboliser, Nature's Own L-carnitine.
How is it claimed to work?
By increasing fat metabolism.
How good is the evidence?
Two studies have shown no changes in the rate fat was burned by the body when L-carnitine was used. There are no published studies showing it's effective for weight loss.
The verdict:
There's no evidence it will help you lose weight.

Ingredient: Horse chestnut (escin)

Where does it come from?
An extract of the horse chestnut.
Examples of products that contain it:
The original research for this article (see page 22) found escin in Cellasene, but it wasn't listed in the ingredients when we bought the product in July this year.
How is it claimed to work?
Aids circulation and prevents fluid retention.
How good is the evidence?
There is none.
The verdict:
Although reducing fluid retention will mean you weigh less, this doesn't mean you're carrying less fat — overweight is due to excess fat, not fluid.

Ingredient: Chitosan

Where does it come from?
The powdered shells of crustaceans, such as prawns and crabs.
Examples of products that contain it:
Exo'fat, Nature's Own Triple Strength ChitoSan and other products labelled chitosan.
How is it claimed to work?
Ties up dietary fat, and stops you digesting and absorbing it.
How good is the evidence?
Most studies that have looked at its effects seem to be flawed in some way, so the evidence isn't good. Some trials show weight loss when coupled with a low-calorie diet, but there are some problems with this data, too. In theory, poor digestion and absorption of fat should affect the amount of calories you get, but there's no long-term evidence that this is an effective weight-loss strategy with a substance such as this.
Risks:
It's possible other essential nutrients may not be properly absorbed. And if it's effective, fat left in the gut could cause fatty diarrhoea.
The verdict:
Poor absorption of fat may have an effect, but unless you follow a low-calorie diet too, the evidence doesn't show chitosan will help with your weight loss.

Ingredient: Brindleberry

Where does it come from?
Brindleberry is an Indian herbal product from the Malabar tamarind. The active ingredient is hydroxycitric acid.
Examples of products that contain it:
Bioglan 3B Beer Belly Buster, Body Lean, Fingerprint Botanicals Chromaslim, Natural Nutrition Brindleslim, Optislim 2000.
How is it claimed to work?
Reduction of carbohydrate converted into body fat and reduced appetite.
How good is the evidence?
Most stored body fat is not formed from carbohydrate, and the way it's claimed to reduce appetite (through 'glucostatic' mechanisms) is now regarded as an oversimplification of how appetite works. Studies involving brindleberry or hydroxycitric acid aren't convincing, and the most recent and best designed showed no effect.
The verdict:
There's no good evidence that it works and the theory behind the claims is also questionable.

Ingredient: Capsaicin

Where does it come from?
It's the 'hot' component of chillies and peppers.
Examples of products that contain it:
Optislim 2000; spicy foods.
How is it claimed to work?
By increasing metabolism and decreasing appetite.
How good is the evidence?
It activates neurons and certain chemicals thought to suppress appetite, and may also speed up some metabolic processes. One study showed a spicy entrée reduced the amount of calories eaten in the rest of the meal by 200, but other studies haven't shown positive effects. However, the varying amount of capsaicin in different foods could be why studies have different findings. And there's no evidence that as a supplement it speeds up metabolism.
The verdict:
In low-fat, spicy foods it may have some effect, but there's no support for taking it as a supplement.

Ingredient: Lecithin

Where does it come from?
It's a type of fat found in soybeans and egg yolk, and is also made by the body.
Examples of products that contain it:
Cellasene.
How is it claimed to work?
Stops fat being stored in fat cells.
How good is the evidence?
One study looked at it in conjunction with protein powder, kelp and vitamin B_6 — but the 24 women who began the diet found little benefit, though they didn't all stick to it well.
The verdict:
There's no support for the theory or use of lecithin in losing weight.

Ingredient: Isoflavones (sweet clover/soybeans)

Where does it come from?
Phytoestrogens from sweet clover or soybeans.
Examples of products that contain it:
Cellasene, Optislim 2000.
How is it claimed to work?
Not specified.
How good is the evidence?
One study reported that women taking extra had no change in their body weight.
The verdict:
There's no evidence it'll help you lose weight.

Ingredient: Ginkgo biloba

Where does it come from?
The leaves of the maidenhead tree.
Examples of products that contain it:
Cellasene.
How is it claimed to work?
It makes you less stressed, so you eat less.
How good is the evidence?
Some good trials show it's a mild anti-stress agent, but there are no studies that show it affects weight loss.
Risks:
There's a possibility of 'serotonin syndrome' (a combination of diarrhoea, flushing, wheezing and abdominal pain caused by excessive release of seratonin) if it's combined with anti-depressant drugs and some other non-prescription preparations.
The verdict:
It may have some effect on stress and so theoretically could help people whose weight problems stem from stress-related overeating, though there's no evidence to support this. Also, some people who tend to eat more as their stress levels reduce could find they put on weight instead.

The research

The research that's the basis of this article was conducted by:

- **Garry Egger**, MPH, PhD, Adjunct Professor of Health Sciences, School of Health Sciences, Deakin University, and Director, Centre for Health Promotion and Research, Sydney.
- **David Cameron-Smith**, BSc, PhD, Lecturer in Nutrition, School of Health Sciences, Deakin University.
- **Rosemary Stanton**, BSc, CNut/Diet, consultant nutritionist.

The research was first published in the *Medical Journal of Australia* as 'The effectiveness of popular, non-prescription weight loss supplements', MJA, Vol 171, 6/20 December 1999, pp 604-608, and in Rosemary Stanton's book *The diet dilemma explained.*

CHOICE thanks them for allowing us to use their research findings and for their time and assistance while preparing this article.

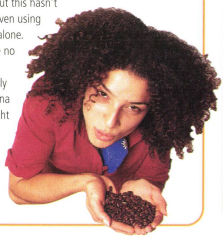
Product examples mentioned by name in this article were bought by CHOICE in July 2000.

Ingredient: Caffeine/guarana

Where does it come from?
Caffeine is found in tea, coffee, cocoa, cola drinks and guarana (which is extracted from the leaves of a South American vine called *Paullinia cupana*).
Examples of products that contain it:
Bioglan 3B Beer Belly Buster, Body Lean, Medislim.
How is it claimed to work?
By increasing alertness and decreasing fatigue, it may also increase the body's ability to use stored fat as energy.
How good is the evidence?
The evidence that endurance athletes benefit from caffeine's ability to let them use fat for energy rather than limited carbohydrate stores is good, but some studies have shown the effect is less in older people and those needing to lose weight.

Some studies have shown caffeine increases metabolism for a short time in people who don't usually consume it, but the studies that have looked at the effect on weight loss have looked at caffeine together with other things like ephedrine or fibre. The one study that looked at caffeine alone showed no effect. Caffeine and ephedrine have been shown to work, but there are side effects (you get used to it and the effect reduces, plus you can become addicted).

So the theory is there and there's good evidence that it may help you use fat stores for energy, but controlled studies haven't shown fat loss in overweight people unless they're on a low-calorie diet.
Risks:
Large amounts of caffeine can cause nervousness, anxiety, gastrointestinal discomfort, insomnia, heart arrhythmia and mild hallucinations. You can also become dependent on it.
The verdict:
As part of a normal diet it may have some minor effects, but this hasn't been proven using caffeine alone. There are no studies specifically on guarana and weight loss.



Ingredient: Pectin

Where does it come from?
It's a type of soluble fibre found in fruit.
Examples of products that contain it:
Bioglan 3B Beer Belly Buster, Exo'fat.
How is it claimed to work?
Makes you feel more satisfied after food and fills you up without calories.
How good is the evidence?
Some not-particularly-good studies have claimed an effect from using pectin, but longer-term studies have found fibre supplements have not helped weight loss.
Risks:
None unless taken in large amounts.
The verdict:
There's no long-term evidence that it works. On the other hand, a diet rich in high-fibre foods is known to help weight loss — try eating plenty of fruit and veg instead.

Ingredient: Fucus vesiculosus

Where does it come from?
It's a type of seaweed.
Examples of products that contain it:
Cellasene, Body Lean.
How is it claimed to work?
The iodine in it makes your thyroid more active and you burn more calories.
How good is the evidence?
There's been only one study published and it's inconclusive.
Risks:
If taken in excess, you could develop an overactive thyroid (hyperthyroidism).
The verdict:
Overweight can be caused by an underactive thyroid gland, but the correct treatment is with thyroxine. The thyroid can tolerate both high and low iodine levels, and there's no evidence that extra iodine helps people to lose weight.

Ingredient: Grapeseed extract

Where does it come from?
Grape seeds.
Examples of products that contain it:
Cellasene.
How is it claimed to work?
Not specified.
How good is the evidence?
There's no rationale for weight loss in well-respected herbal texts and no published studies.
The verdict:
There's no evidence and no rationale for its use to lose weight.

Ingredient: St John's wort

Where does it come from?
It's a herb.
Examples of products that contain it:
Bioglan 3B Beer Belly Buster.
How is it claimed to work?
Not specified.
How good is the evidence?
Extracts of this herb are known to be a mild anti-depressant, so it may help people who overeat when they're depressed.
The verdict:
While it's known to be a mild anti-depressant, there's no evidence it's effective in helping you lose weight. Interactions with some prescribed drugs can be a problem.

Other ingredients

Milk thistle; inositol; collagen hydrolysate; citron K; glycerine; aminogen; pyruvate; various amino acids; potassium sorbate; sodium benzoate; demineralised water.
What products contain them?
These substances were present in several of the weight-loss preparations studied by the original researchers; some of them are preservatives.
How good is the evidence?
There's no theoretical or practical rationale, and no published evidence, as to why any of these things should help you lose weight — either on their own or taken together.
The verdict:
There's no evidence any of them will help you lose weight.

Travelling made easier

Are you often racing to catch that early morning flight, or to get to your meeting at the other end? A small carry-on trolley suitcase can make your travelling life a lot easier.

IN BRIEF

- None of these small (hand-baggage size) trolley suitcases is water-resistant, so you need to watch out for sudden downpours.
- They're quite heavy — only two weigh less than 3 kg and five 4 kg or more — which is not a good start for what's meant to be your hand luggage.
- The model our trialists liked most — by quite a margin — unfortunately wasn't as good as many of the others for water resistance and durability.
- Some of the models have a special padded pocket for a laptop computer — see the table, page 28.

THEY CAN LOOK QUITE SMART AND they're definitely handy — small, wheeled trolley suitcases you can pull along rather than carry. No more tired arms from lugging cabin baggage around the airport while you're waiting for a connecting flight.

We tested 15 trolley suitcases that should fit the bill for carry-on luggage. We also got six Qantas cabin crew — champions of short-stay travel — to trial them for us.

Our tests

To take the guesswork out of your buying decision:

- We packed and unpacked all the cases, checking the usefulness of various compartments and pockets.
- We checked out other nifty storage areas.
- We repeatedly opened and closed the cases to see whether the zips and locks (if any) worked well.
- Six experienced Qantas cabin crew trialled them all to determine the most comfortable and practical ones. The trial involved manoeuvring the cases around a course with different surfaces and obstacles likely to be encountered at an airport — concrete, asphalt, corners, carpet, a manually opening door, a lift and stairs. For each model they noted how easy (or difficult) it was to manoeuvre and how comfortable to use. We've included some of their comments with the profiles; see page 26.
- After our trialists had finished with them, we put the cases through a number of rigorous tests for durability and stability: one-and-a-half hours on a rolling-road rig (representing a bumpy path), dropping them from their handles, and testing for how easily they can be knocked over and to see how much rough handling the material, handle, frame and wheels could withstand. We also tested them for water resistance (see *Raindrops ...*, page 26, for details).

WHAT TO BUY

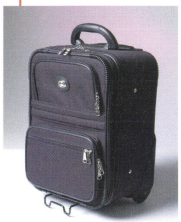
PAKLITE 606 Mini Office	$185
AIRPORT Universal II Collection 788 OF	$130
RICARDO Mission Wheelaboard 9018	$149

These three models were the top scorers overall, though if you're more concerned with ease of use (and will only be using the case occasionally) you'd probably prefer the **AIRPORT**. The **PAKLITE** and **RICARDO** were better for durability and water resistance. We've profiled these and four other reasonable scorers (see page 26) to give you an idea of the different styles available.

WHAT TO LOOK FOR

■ The higher the **floor clearance** (from the wheels to the bottom of the case), the less likely the suitcase will get damaged from travelling on rough or uneven surfaces.

■ A **large wheelbase** (as much space as possible between the wheels) generally increases the suitcase's stability, making it less prone to falling or tipping over. This is particularly important for a suitcase without a stabiliser tray (see below).



VANESSA MARSHALL

■ Some models have a **stabiliser tray** (see photo, left): an extendable base or frame you pull out of the bottom of the case to increase its stability when standing upright (see the table on page 28 for model details). In our tests, these models were generally less likely to tip over forwards when resting on the ground. However, you may find it annoying having to pull out the tray every time you rest the suitcase, and then bending down to push it in when you're off again. And if you leave it out, it'll probably get in the way.

■ If you don't want to lug unnecessary **weight** about, choose a lightweight suitcase. Some in our test weighed more than 4 kg empty. So if you wanted to take one of those on board a flight, it'd leave you less than a kilogram for the things you want to take if the airline imposed a 5 kg limit for carry-on luggage. To date most haven't usually weighed cabin baggage, though if you're lugging an apparently heavy case along, they may want to check its weight. But there's talk now of introducing a weight limit because of potential accidents with very heavy cases becoming dislodged in overhead lockers — see also *All Aboard!*, far right.

■ **External pockets** can be very handy for storing items you want to use on the flight, but our tests showed they can collect rainwater and let it seep into the bag

VANESSA MARSHALL

This handy pocket on the Ricardo Mission 9018 gives you access from both inside and outside.

VANESSA MARSHALL

— especially protruding pockets with coarse zips. It's best to keep the bag out of the rain.

■ Many trolley suitcases have various **pockets** and **compartments** (such as for a laptop computer, business cards, pens or toiletries — see the photos, above and below right). Make sure the compartments and pockets are deep and large enough to fit the items you want to carry. And if they can be unzipped on three sides, you can get easy access to your stuff.

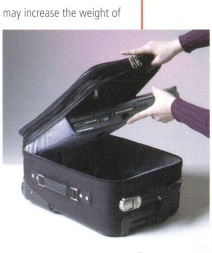
■ The **retractable handle** comes in a variety of designs. Some work on friction alone, others have a button release/locking mechanism, which means the handle won't collapse if you lean on it, but may be a little fiddly to use. Try the different types before you buy, and see how comfortable they feel. On some models, the handle and pull-out mechanism are covered — our trialists found this unnecessary.

■ Make sure you're happy with the **handle height**. If it's too short or too long, pulling the case along is more difficult.

■ Carrying the bag is usually easier if there's a **handle** on both a short side (the opposite end from the wheels) and a long side. This also makes lifting the bag into a car boot, onto a train, or stashing it in a luggage rack easier. Most cases in this test have a handle on the long side — the **ANTLER Xenon 0680746** and **TRAVELPRO Walkabout Rollaboard 8718** don't.

■ **External reinforcements** may increase the weight of the suitcase, but they're useful for protecting the areas most prone to damage, such as around the back bottom edges (especially near the wheels), and other areas around the base and sides.

■ **Sturdy padlocks** can make it a bit more difficult for thieves (or may even deter them from stealing from your bag).



VANESSA MARSHALL

ALL ABOARD!

One note of caution if you want to take one of these cases onboard a flight: don't pack more into it than you would into a conventional overnight bag just because it's easy to pull along. These bags are generally pretty heavy already — five of the 15 models tested weighed 4 kg or more when empty (only two weighed less than 3 kg).

Fully packed with heavy items, these cases could be a danger to both passengers and cabin crew because, if one became dislodged in the overhead locker during a flight, it could cause a nasty injury if it fell on someone. Cabin crew in Australia recently called for all of this type of luggage to be weighed for this reason.

PROFILES

Profiles are of the top seven models in the test, in rank order from left to right. Prices shown are a good target to aim for when shopping around, based on nationwide checks in July 2000. Anything lower is a bargain.

PAKLITE 606 MINI OFFICE

Target price: $185

Suitable for the business traveller: one compartment, five pockets, divider file, card and pen holders.

GOOD POINTS

- Tough fabric — a very good score in the slash test and a good score for puncture resistance.
- Durable — very good score for the rolling-road and drop test.
- Very stable with the stabiliser tray when standing upright (but quite unstable if you don't use it, which you might find a bit of a hassle).
- Easy to use — equal second in the user trial.
- Easy to pack.

BAD POINTS

- One of the heavier models — weighs 4.1 kg.

TRIALISTS' COMMENTS

"Not as stable as some of the others."
"Wobbly over rough surface."

AIRPORT UNIVERSAL II COLLECTION 788 OF

Target price: $130

Suitable for the business traveller: one compartment, six pockets (including one for a laptop computer), divider file, card and pen holders.

The trialists loved this one, but it wasn't too good for durability and water resistance. It could be a good choice if you won't need to use it very often.

GOOD POINTS

- The model our trialists liked the most — best user trial score.
- Very stable with the stabiliser tray when standing upright (but a little less stable if you don't use it, which you might find a bit of a hassle).
- Very easy to pack.

BAD POINTS

- One of the poorer models for durability and water resistance, including the worst score for puncture resistance.

TRIALISTS' COMMENTS

"Like walking on air. Turns tight corners beautifully."
"Best by far."
"The pulled-out handle doesn't click in well enough to stay up. It collapses as soon as you lean on it."

Raindrops keep falling on my ... clothes?

Can you use a small trolley suitcase in the rain without the contents getting wet? Are they waterproof or water-resistant? No. None of the models we tested will keep your packed clothes dry if you're stranded without protection in heavy rain or a sudden tropical downpour.

After about 10 minutes in such simulated conditions, even the best in the test had let in more than half a litre of water to dampen the clothes; the worst had soaked them with more than 3.5 L. Most of the water had seeped through openings for the handle mechanism, pockets and zips.

QANTAS QF2000

Target price: $115

One compartment, four pockets. (This model was recently discontinued, but you may still find it in shops.)

GOOD POINTS

- Tough fabric — a very good score in the slash test and a good score for puncture resistance.

BAD POINTS

- Not as easy to pack as the others — relatively flat pockets with limited access.
- Relatively low score for stability when standing upright.

TRIALISTS' COMMENTS

"Nice compact bag."
"Very smooth."

RICARDO MISSION WHEELABOARD 9018

Target price: $149

One compartment, six pockets (and has access to some of the outer pockets from the inside).

GOOD POINTS

- Very durable — equal best score for the rolling-road and drop test.
- Very good score in the slash test.
- Easy to use — equal second in the user trial.
- Very easy to pack.

BAD POINTS

- Relatively low score for stability.

TRIALISTS' COMMENTS

"Very good bag."

"The handle tends to collapse when it's pushed along."

CELLINI 44045 DOMESTIC WHEEL-ABOARD

Target price: $159

One compartment (expandable), six pockets.

GOOD POINTS

- Tough fabric — a very good score in the slash test and a good score for puncture resistance.
- Very stable with the stabiliser tray when standing upright (but quite unstable if you don't use it, which you could find a bit of a hassle).
- Easy to pack.

BAD POINTS

- One of the heavier models — weighs 4.1 kg.

TRIALISTS' COMMENTS

"Toppled over around tight corners."

"Don't like the handle recess with zip. There's no need for it, and it's hard to operate."

SAMSONITE SILHOUETTE 7 SA7022

Target price: $229

Suitable for the business traveller: one compartment, four pockets (including a padded one suitable for a laptop computer), divider file, business card and pen holders.

GOOD POINTS

- Tough fabric — a very good score in the slash test and a good score for puncture resistance.
- Durable — very good score for the rolling-road and drop test.
- Very stable with the stabiliser tray when standing upright (but less so if you don't use it, which you might find a bit of a hassle).
- Very easy to pack.

BAD POINTS

- The heaviest model in the test — weighs 4.3 kg.

TRIALISTS' COMMENTS

"Not good over very rough ground."

"Pushbutton release for handle didn't work well."

ANTLER XENON 0680746

Target price: $135

One compartment, five pockets.

GOOD POINTS

- Very durable — equal best score for the rolling-road and drop test.
- Best for water resistance (though it still took in more than half a litre of water in the equivalent of a heavy 10-minute rain shower).
- Very good score in the slash test.
- Easy to pack.
- One of the lighter models tested — weighs 2.8 kg.

BAD POINTS

- Very unstable when standing upright — the equal lowest score for stability.
- No handle on the long side.

TRIALISTS' COMMENTS

"Tipped slightly, wobbling a bit down stairs."

"The handle was OK when being pulled, but much too high when you stopped. It came up to my ribcage."

Small trolley suitcases

1

	Brand / model (in rank order)	Manufacturer / distributor	Origin	Target price ($)*	Warranty (years)	Dimensions** (H x W x D, cm)	Weight (kg)	Volume: stated / expanded (L)	Compartments	Internal pockets	Divider file pocket	External pockets	Laptop / wallet and cards / pockets
	PAKLITE 606 Mini Office	Paklite	China	185	3	48 x 34 x 23	4.1	30	1	2	✓	3	– / ✓
	AIRPORT Universal II Collection 788 OF	Airport	China	130	3	38 x 36 x 17	3.9	32	1	2	✓	3	✓ / ✓
	RICARDO Mission Wheelaboard 9018	Courier	Vietnam	149	10	43 x 32 x 22	3.8	34	1	3		3	
equal	**CELLINI** 44045 Domestic Wheel-aboard	H Stevens	China	159	3 **(C)**	48 x 34 x 23 **(D)**	4.1	26 / 31	1	4		2	
	QANTAS QF2000 **(A)**	Courier	Vietnam	115	3	48 x 34 x 23	3.3	ns	1	2		2	
	SAMSONITE Silhouette 7 SA7022	Airport	China	229	4	48 x 34 x 23	4.3	32	1	2	✓	1	✓ / ✓
	ANTLER Xenon 0680746	Antler	China	135	3	48 x 34 x 23	2.8	28	1	3		2	
equal	**CELLINI** 66043 Domestic Wheel-aboard	H Stevens	China	149	3 **(C)**	48 x 34 x 23	2.6	26	1	2		2	
	RICARDO Big Sur 2000 Compact Wheelaboard R9917	Courier	Thailand	199	'Lifetime'	43 x 33 x 18	4.2	36	1	3		4	
	PAKLITE 262 Wheelaboard	Paklite	China	135	3	48 x 34 x 23	3.0	30	1	2		1	
	ANTLER Airlight 0113740	Antler	China	185	3	48 x 34 x 23	4.0	32	1	3		0	
equal	**ELITE** Waldorf Expandable Ezi-Traveller WF66	Elite	China	140	10	44 x 35 x 22 **(D)**	3.9	ns	1	2		3	
	HEDGREN Globetripper HGA 100AXS	Paklite	China	200	2	46 x 29 x 17	3.1	22	1	0	✓	3	✓ / –
equal	**TRAVELPRO** Walkabout Rollaboard 8718 **(B)**	Elite	Thailand	200	10	46 x 30 x 17	3.0	ns	1	3	✓	2	
	COURIER Network C2118	Courier	Vietnam	139	3	46 x 33 x 22	3.5	33	1	4		3	

* Prices shown are a good target to aim for when shopping around, based on nationwide checks in July 2000.

** Most measure 48 x 34 x 23 cm (or 105 cm added up), the size that airlines generally accept as cabin luggage in economy class.

ns Not stated.

(A) According to the manufacturer, this model has been discontinued, but you may still find it in shops.

(B) This model has been discontinued. The new-model Walkabout 2 has a new trolley system and cosmetic changes.

(C) Three years against faulty construction and/or faulty component parts; one year against outer fabric defects.

(D) Expanded.

(E) With the stabiliser tray pulled out.

GEOFF ANDREW

We got some expert short-stay travellers to assess the suitcases' manoeuvrability and ease of use — six Qantas cabin crew. Thanks to them for their time.

GEOFF ANDREW

What about the rest?

- The **CELLINI 66043** scored poorly for stability, and worst for overall performance/durability, particularly in the slash test. It emerged from this test with a large gash on the outside and severely cracked backing material.
- The **RICARDO Big Sur** and **COURIER Network** had problems with stability that weren't made up for by particularly good scores in other categories. The latter also scored worst for water resistance.
- The **ANTLER Airlight** had the lowest score in the user trial, though it's quite stable even without a stabiliser tray.
- The **ELITE Waldorf** scored poorly for water resistance, and in the slash test its leather-like backing was damaged.
- The **TRAVELPRO Walkabout, HEDGREN** and **PAKLITE 262 Wheel-aboard** scored poorly for water resistance and stability, and didn't score highly in the user trial.

2 Packing assessment	3 Water resistance score (%)	4 Rolling-road and drop test score (%)	5 Puncture resistance score (%)	6 Slash resistance score (%)	7 Stability score (%)	8 Overall performance and durability score (%)	9 User trial score (%)	10 Overall score (%)	Brand / model (in rank order)	
Good	60	90	80	90	80 **(E)**	80	78	79	**PAKLITE** 606 Mini Office	
Very good	40	70	49	70	80 **(E)**	62	90	76	**AIRPORT** Universal II Collection 788 OF	
Very good	52	100	66	90	50	72	78	75	**RICARDO** Mission Wheelabaord 9018	
Good	59	80	77	90	80 **(E)**	77	65	71	**CELLINI** 44045 Domestic Wheel-aboard	equal
OK	47	70	78	90	50	67	74	71	**QANTAS** QF2000 **(A)**	
Very good	56	90	80	90	80 **(E)**	79	58	68	**SAMSONITE** Silhouette 7 SA7022	
Good	69	100	75	90	20	71	63	67	**ANTLER** Xenon 0680746	
Good	57	80	70	30	40	55	75	65	**CELLINI** 66043 Domestic Wheel-aboard	equal
Very good	50	90	65	90	40	67	63	65	**RICARDO** Big Sur 2000 Compact Wheelaboard R9917	
Good	39	80	72	90	50	66	62	64	**PAKLITE** 262 Wheelaboard	
OK	62	90	73	90	70	77	50	63	**ANTLER** Airlight 0113740	
OK	25	90	66	70	60	62	65	63	**ELITE** Waldorf Expandable Ezi-Traveller WF66	equal
Good	29	100	74	90	50	69	57	63	**HEDGREN** Globetripper HGA 100AXS	
Good	39	90	73	90	20	62	58	60	**TRAVELPRO** Walkabout Rollaboard 8718 **(B)**	equal
Very good	19	90	57	90	40	59	60	60	**COURIER** Network C2118	

1 Features

See *What to look for*, page 25, for more on the usefulness of various features.

2 Packing assessment

We packed each suitcase with the same load — a towel, t-shirts, shirts, shorts, shoes and a book — and then unpacked them. We assessed how useful the pockets and compartments were, how well the zips worked, how easy the padlocks and compression straps (if any) were to use and how much usable space the case provided.

3 Water resistance score

We filled the suitcases with weighed fabric loads and left them for 10 minutes under a controlled sprinkle of water (about 3 L/min) representing a heavy rain shower. We then took out the fabric loads and weighed them. The best in the test had let in more than half a litre of water; the worst more than 3.5 L. See *Raindrops keep falling on my … clothes?* on page 26 for more on this.

4 Rolling-road and drop test score

To test the durability of the telescopic handle, frame, wheels, bearings and stitching we subjected each case to one and a half hours in total on the rolling-road rig, which simulates a bumpy path, and 750 drops (while fully loaded) from each handle.

5 6 Puncture and slash test scores

If a case is hit by or lands on a pointed object, or someone tries to slash the fabric, it needs to be tough to resist damage and attempts to steal the contents. We tested just how tough they were by dropping a 1 kg steel cone from a height of 25 cm onto each case, and by swinging a tapered steel bar over a flat suitcase surface to see if it tore. We repeated both tests five times and then checked the outer and inner surfaces for damage.

7 Stability score

We packed each suitcase with a 4 kg load and placed it upright on an inclined surface, increasing the angle until it fell. The models that have a stabiliser tray (an extendable base — see *What to look for*) for added stability were tested with the tray pulled out for scoring purposes. We also tested them with the tray retracted — all four fell over a lot more easily.

8 Overall performance and durability score

Water resistance, the rolling-road and drop test, puncture resistance, slash resistance and stability each contribute 20% to this score.

9 User trial score

Six Qantas cabin crew helped us evaluate the suitcases from a user's point of view. They manoeuvred the suitcases around a course that included different surfaces and obstacles likely to be encountered at an airport. The trialists then rated each case and we converted the rating to a percentage score.

10 Overall score

- User trial: 50%.
- Overall performance and durability: 50%.

Bye-bye to Fly Buy?

It's difficult enough to gather enough Fly Buys points to reach even the nearest airport to Sydney; it's made even harder if Fly Buys and travel agents pretend your letters, faxes and emails arrived with all text deleted.

In February this year I bought three Qantas tickets and the travel agent duly recorded my Fly Buys number on the docket. But when the Fly Buys points summary arrived for the period in question, no points whatsoever had been awarded for the transaction.

In contacting Fly Buys, the travel agent and its headquarters I've so far spent an amount (for emails, faxes and letters) that far exceeds the ultimately puny value of the Fly Buy points I finally received in July. Not a good way to build up your travel piggy bank. So perhaps it's time to say 'Bye-byes to Fly Buys' and sing 'Come cry with me . . .'.

Henk Verhoeven
Beacon Hill, NSW

Free calls?

Recently there's been a good deal of publicity given to frequent flyer schemes, and the extreme difficulty of using points to buy reward flights at popular times on popular routes. It seems the same sort of penny-pinching is being applied to other apparent 'freebies'.

Take, for example, my Telstra mobile phone plan, the 'PocketSaver 10', which at the time of purchase had a $10 per month access fee and offered $2 per month worth of calls free. When I queried the lack of any free calls on a recent account, I was told that the free-call allowance only applied to calls charged at off-peak rates. Since all my calls were made at peak times, they weren't eligible for the free-call allowance. The information published on the Testra website at the time made no mention of this subtle trap.

Matthew Wilson
Gladesville, NSW

This letter highlights the importance of reading the fine print on any contract you enter into and making sure you understand all the conditions.

Telstra has meanwhile updated its website and included a note explaining the condition for free calls in its Flexiplans PocketSaver 10 and 15. It told us this information was mentioned in the mobile phone plan document available before the GST was introduced, and should have been explained and provided to the customer at the point of sale. For this particular case, Telstra offered to compensate Mr Wilson for the inconvenience caused.

For more information on mobile phone plans — and hints on how to avoid the traps — see our article in the August issue of CHOICE — Mobile phones: don't get caught in a trap.

Letter of the month

We want to hear from you — your experiences help our research and often let other readers know about scams and rip-offs. To thank you for writing to us, *Your Letters* awards a prize of a CHOICE book to the 'Letter of the month'. This month's winner, Matthew Wilson of Gladesville, NSW, receives *Our home*, or any other book of his choice from the catalogue you received with this issue.

We're sorry we don't have the resources to answer all your letters personally, and in the magazine we may edit them or print only an extract. See page 2 for how to reach us.

VANESSA MARSHALL

When you *do* need extra salt

Your article on salt intake (*Bodywise*, July 2000) was, as usual, interesting and informative. However, the boxed section 'Who needs extra salt?' contains a few statements that could be misleading, and would be better clarified.

Your advice that everyday sweating and cramps don't require salt (sodium) replacement is generally true for people carrying out normal activity. However, acutely low salt levels (hyponatraemia) can present a life-threatening condition for people who exert themselves at work or exercise in hot conditions, sweat profusely and replace the fluids with plain water. This has also been a problem for young people who've sweated profusely at dance parties, perhaps after using drugs such as ecstasy, and consumed large quantities of water. In this setting, the early stage of acutely low salt levels commonly causes cramps and shaking, and can progress to unconsciousness.

The best advice for people who've sweated profusely after severe exertion is to replace the fluid with a balanced drink containing salt and sugar, which will best replace the losses through sweat and exercise. In the spirit of sensible consumerism, it doesn't need to be a fashionably colourful sports drink — it's the salt and sugar you need.

Sue Ieraci
(emergency physician)
Via Internet

These comments are valid for very extreme conditions, but even the hottest jobs nowadays are supposed to offer safer working conditions, with adequate precautions to prevent all forms of heat illness. As for the teenage culture of drugs and risk-taking, we fear it pays scant attention to articles in CHOICE, unfortunately.

Fresh juice

It's yummy, healthy and easy to make at home with a juice extractor. Which of the 15 models tested make good juice *and* are easy to assemble, use and clean?

IF YOU LOVE A GLASS OF FRESH FRUIT or vegetable juice, you don't have to make a special trip to the fresh juice stand in your local shopping centre. With a domestic juice extractor and some good-quality fresh fruit and vegies you can get your fix any time at home.

We tested 15 juice extractors with fruit and vegies to see what kind of juice they make, and whether they clog up or leak.

How they work

The pictures in the profiles on page 32 give you a good idea of the variety of styles and sizes of domestic juice extractors on the market. Smaller models that take up less bench space (like the **BRAUN, RONSON Vitajuice 2HD-8248, KENWOOD Centrifugal Juicer JE350, PHILIPS** and the two **SUNBEAM** models) can usually make a glass or two of juice before the pulp container has to be emptied. Larger models can cope with more and are suitable for family use.

Regardless of size or style, all the juice extractors tested work the same way. You cut the fruit and vegies into suitably sized chunks, push them with a safety plunger down a feeding chute onto a rotating blade where they're pulped. A fine, curved sieve separates the pulp from the juice. With most models, you can extract juice from around 1 kg of fruit or vegies in less than three minutes. Some manufacturers recommend running it for a maximum of four to five minutes at a time and letting the machine cool down for two minutes before continuing.

Assembling and cleaning

The fewer and more streamlined parts a juice extractor has, the easier it generally is to take apart and clean. In our test, the **TIFFANY Juice Extractor JE603** — with its eight large parts — was one of fiddliest to assemble. The juice bowl and blade on the **MAXIM** are very difficult to remove. All the other models can be easily put together and taken apart.

The **BREVILLE Juice Fountain Professional JE90** and **SALTON MAXIM** include a cleaning brush, and the **PANASONIC** has a special 'brush feature' — a brush attached to a bottle that's filled with water and inserted into an opening near the blade. You move it back and forth along the blade, cleaning it while you run the motor and squeeze out the water. You still have to remove the sieve and rinse off pulp residues under running water, but you'll spend less time scrubbing at the sink.

WHAT TO BUY

Nearly all the juice extractors in the test produced juice of a comparable (and pretty good) quality and quantity. Below are the top six models.

PANASONIC Household Juice Extractor MJ-66PR	$145
BREVILLE Juice Fountain Professional JE90	$158
BRAUN Multipress Compact MP75 Automatic Juice Extractor	$95
MOULINEX 753	$109
RONSON Vitajuice 2HD-8248	$49
SALTON MAXIM Juiceman II JM2	$129

IN BRIEF

- The 15 juice extractors ranged in price from under $50 to more than $150. Only one of the cheaper models made it into the *What to buy* list.
- They're all relatively easy to assemble and clean — for hints, see below left and page 32.
- Want to buy a model we haven't tested? See page 33 for *What to look for.*
- For some important safety hints, see *Avoiding accidents* on page 34.
- See page 35 for which fruit and vegies to use and how to prepare them; and page 32 for a few interesting juice combinations.

JUICE RECIPES

Use fresh fruit and vegetables, wash and prepare them as appropriate — for hints see *Which fruit?* on page 35 — and process them in a juice extractor. Each recipe serves about two.

You can reuse fruit pulp in bread, cakes and muffins, and add vegetable pulp to soups, frittatas and casseroles.

PINEAPPLE AND MINT JUICE

1 pineapple
5 sprigs fresh mint leaves
Note: Pineapple contains an enzyme called bromelain which helps break down protein, so this is a great juice if you've overindulged on meat or dairy products.

APPLE, CELERY AND CARROT JUICE

2 Granny Smith apples
2 celery sticks (it's best to remove the strings)
2 carrots
Note: Carrots contain Vitamin A, which is essential for maintaining the skin, eyes, urinary tract and the lining of the nervous, respiratory and digestive systems.

PROFILES

Profiles are of the models in the *What to buy* list, in rank order from top to bottom, left to right. Prices shown are a good target to aim for when shopping around, based on nationwide checks in July 2000. Anything lower is a bargain.

PANASONIC HOUSEHOLD JUICE EXTRACTOR MJ-66PR

Target price: $145

VANESSA MARSHALL

GOOD POINTS

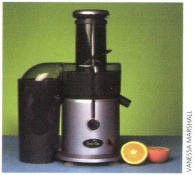
- Best for both juicing performance and ease of use.
- Good switch control.
- Large internal pulp container.
- Adequate chute size.
- Good spout height and position — fits a large jug (not supplied).
- Special cleaning brush for the sieve.

BAD POINTS

- No safety lock system.

BREVILLE JUICE FOUNTAIN PROFESSIONAL JE90

Target price: $158



VANESSA MARSHALL

GOOD POINTS

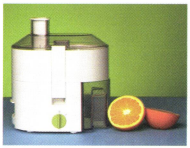
- Second best for juicing performance.
- Equal second best for ease of use.
- Large pulp container attached to the unit.
- Extra-large chute — fits large or whole pieces of fruit.
- Good spout height and position — fits a large jug (not supplied).
- Comprehensive, easy-to-understand instructions including recipes, nutrition information and a troubleshooting guide.

BAD POINTS

- Removing the sieve and its basket from the motor unit can be awkward.
- Safety locking arm requires a little strength to engage.
- Pulp can accumulate around the lid.
- There were a few problems with juice collection in our test: some juice continued to drip out of the spout afterwards and some sprayed and leaked from the pulp container lid while processing very juicy fruit. (Lining the pulp container with a plastic bag may overcome this last problem.)

BRAUN MULTIPRESS COMPACT MP75 AUTOMATIC JUICE EXTRACTOR

Target price: $95



VANESSA MARSHALL

GOOD POINTS

- Equal second for ease of use.
- Good-size pulp container.
- A large juice jug is included.
- All parts are claimed to be dishwasher-safe.

BAD POINTS

- Narrow chute.
- Juice can leak from the spout when you remove the sieve and pulp container.
- Pulp can accumulate around the lid.

MOULINEX 753

Target price: $109

VANESSA MARSHALL

GOOD POINTS

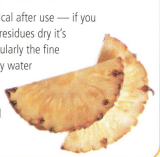
- Very good juicing performance.
- Large pulp container attached to the unit.
- Adequate chute size.
- Good spout height and position — fits a large jug (not supplied).
- Plastic components are claimed to be dishwasher-safe.

BAD POINTS

- Pulp can accumulate around the sieve and lid.
- Switch is stiff and a bit awkward to operate.

Cleaning hint

Do it as soon as practical after use — if you let the juice and pulp residues dry it's harder to clean, particularly the fine sieve. Use warm, soapy water for the plastic parts and a hard-bristle washing-up brush and running water for cleaning the sieve.



SALTON MAXIM JUICEMAN II JM2

VANESSA MARSHALL

Target price: $129

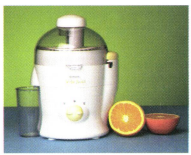
GOOD POINTS

- Very good juicing performance.
- Good switch control.
- Extra-large pulp container (but it's not fitted to the unit).
- Adequate chute size.
- Good spout height and position — fits a large jug (not supplied).
- Comprehensive, easy-to-understand instructions including recipes, nutrition information, troubleshooting guide and an audio cassette.

BAD POINTS

- Removing the sieve and its basket from the motor unit can be difficult — and juice drips from it.

RONSON VITAJUICE 2HD-8248


VANESSA MARSHALL

Target price: $49

GOOD POINTS

- Equal second for ease of use.
- Tray supplied to feed fruit pieces into the chute.

BAD POINTS

- Small pulp container — you'll need to empty it if you want to make more than a couple of glasses of juice.
- Narrow chute — fruit and veg have to be cut into smaller pieces.
- The spout continues to drip juice after processing.

WHAT TO LOOK FOR

- A **safety lid lock** is an important safety feature. See *Avoiding accidents* on page 34 for more on this.
- The **fewer** the **parts**, the easier it'll be — generally — to assemble, take apart and clean.
- A streamlined design with **few cracks or crevices** means less food can get trapped.
- Juice extractors come with or without a **juice jug**. Those models with a jug that slots into the unit will probably not be quite as messy because juice won't splash onto the work bench. Some models supply a jug but not all slot into the unit (see the table for details). On models without a juice jug, check that the **spout height and position** will fit an appropriately sized jug.
- **Pulp** is collected either in a container attached to the unit (usually at the side), or in a cavity around the sieve. With the former, less pulp is likely to build up around and clog the sieve. So when you make juice for several people, you don't have to remove the blade unit and empty the pulp out before you can continue juicing, as you might have to do with the other type. See the table on page 34 for details of the pulp containers.
- A **large pulp container** means you can make more than one or two glasses of juice at a time without having to empty it. With most models in the test you can easily juice about a kilogram of fruit without having to empty the pulp container (except the **RONSON Vitajuice 2HD-8248** and **KENWOOD Centrifugal Juicer JE350**).
- **Chute size.** The **BREVILLE Juice Fountain Professional JE90** has the biggest chute, fitting large or whole pieces. The chutes on the **PANASONIC**, **MOULINEX** and **SALTON MAXIM Juiceman II JM2** take larger pieces, too. On all other models tested, the fruit and vegies have to be cut into small, thin pieces to fit the narrow, curved chutes.
- Most models have an on/off switch only. If there are **two speeds**, the higher is usually better for hard fruit and vegies.

What about the rest?

The other juice extractors in the test scored lower overall — some weren't as easy to use and others had problems producing a good-quality juice.

Common problems we encountered included:

- A narrow or very narrow chute (on all remaining models), which makes preparing juice more time-consuming.

- Pulp accumulating around the lid and/or sieve — see left (on the **BREVILLE Vitamax JEB55**, **SUNBEAM Pure Juice JE050**, **PHILIPS HR2825** and **RONSON Superjuicer 2HU-8246**).
- Too many cracks and crevices where pulp can accumulate (on the **KENWOOD JE550**, **BREVILLE Blend 'n' Juice Duo BJ100** and **TIFFANY**).
- Leaking juice (see right) — from the spout during processing or afterwards (on the **PHILIPS HR2825**, **KENWOOD Centrifugal Juicer JE350** and **SUNBEAM Juice 'n' Blend JB020**), from around the lid (on the **BREVILLE Blend 'n' Juice Duo BJ100** and the two **SUNBEAM** models), or from the pulp container (on the **RONSON Superjuicer 2HU-8246**). On the **BREVILLE Blend 'n' Juice Duo BJ100** it even leaked into the motor base. (This juice extractor also had the lowest performance score — it produced less than average quantities of juice.)

VANESSA MARSHALL

Juice extractors

Brand / model (in rank order)	Manufacturer / distributor	Origin	Target price ($) *	Warranty (years)	1 Weight (kg)	2 Juice jug supplied capacity (mL)
PANASONIC Household Juice Extractor MJ-66PR	Panasonic	Japan	145	1	2.9	
BREVILLE Juice Fountain Professional JE90	Breville	China	158	1	3.9	
BRAUN Multipress Compact MP75 Automatic Juice Extractor	Gillette	Mexico	95	1	1.9	Connected / 700
MOULINEX 753	Moulinex / Shriro	Spain	109	1	2.9	
equal **RONSON** Vitajuice 2HD-8248	Housewares International	China	49	1	1.9 **(B)**	Separate / 200
equal **SALTON MAXIM** Juiceman II JM2	Salton Maxim	Korea	129	1	3.5	
KENWOOD Centrifugal Juicer JE350	Hagemeyer	China	58	1	1.9 **(B)**	Separate / 200
BREVILLE Vitamax JEB55	Breville	China	60	1	1.9	Connected / 400
KENWOOD JE550	Hagemeyer	China	75	1	2.4	Connected / 500
SUNBEAM Pure Juice JE050 **(A)**	Sunbeam	China	79	1	2.3	Connected / 625
equal **PHILIPS** HR2825	Philips DAP	China	71	1	2.4	
equal **RONSON** Superjuicer 2HU-8246	Housewares International	China	81	1	2.6 **(B)**	Separate / 200
BREVILLE Blend 'n' Juice Duo BJ100	Breville	China	91	1	2.5 **(C)**	
SUNBEAM Juice 'n' Blend JB020	Sunbeam	China	85	1	2.0 **(C)**	
TIFFANY Juice Extractor JE603	GAF Control	China	46	1	2.5	Connected / 300

* Prices shown are a good target to aim for when shopping around, based on nationwide checks in July 2000.
(A) This model has been discontinued, but you may still find it in shops.
(B) Not including the juice jug.
(C) Not including the blender jug.

Avoiding accidents

VANESSA MARSHALL

Always use the safety plunger supplied — *not* your fingers — to push fruit and vegetable pieces down the chute. On six of the juice extractors tested the chute was short and wide enough for fingers to reach down and the tips to touch the grating blade (the Breville Juice Fountain Professional JE90, Moulinex, Maxim, Philips HR2825, Sunbeam Juice 'n' Blend JB020 and Tiffany).

■ Except for the top-scoring **PANASONIC**, all the juice extractors tested have a lid lock — an important safety feature that won't let you operate the juice extractor unless the lid's locked into place, so you can't start the motor accidentally.

■ As far as electrical safety is concerned, all the juice extractors passed our tests. However, take care with spilled juice. Don't let spills accumulate under a juice extractor, where they could get sucked up through ventilation holes into the motor. The unit could become 'live' and give you an electric shock if you touch it. Switch off the motor and unplug the cord before you clean up any spills.

FOR PEOPLE WITH A DISABILITY

An occupational therapist from the Independent Living Centre assessed each juice extractor for use by people with a disability.

The **BREVILLE Vitamax JEB55** was considered most suitable for many disabilities, including hand weaknesses such as arthritis or Parkinson's, poor co-ordination and visual impairment. Its parts fit easily together; it has a good switch and lockable latches; and its juice jug has a D-shaped handle. Unfortunately it has a very narrow chute, so you'll have to be able to cut the fruit and vegies into small pieces. Carrots, apples, melons and pineapple can be particularly hard to cut if you have weak hands or pain in your hands or wrists.

If you have very limited hand function or only one hand to use, the **PANASONIC** may be most suitable. It's also recommended for people with visual impairments or poor co-ordination. This model has only a few component parts that fit together easily, a good switch and an adequately sized chute, though the latch could be a bit difficult to undo if you lack hand/finger strength, and it has no safety lid lock.

What to look for

■ **Assembly and disassembly** — look for a unit with as few parts as practical, that fit together and can be taken apart easily.

■ A **lid lock** should have very little resistance to a positive touch.

■ A **juice jug** should have a large, D-shaped handle. (If there's no jug included, use one that suits you and fits under the spout.)

■ If the **pulp container** is separate from the unit, it'll be easier to empty, particularly if you have to empty it during processing.

■ The **sieve** (or blade unit) should be easy to remove and clean.

■ Look for a large switch or pushbutton **controls** with a soft touch and tactile feedback. Dial controls should have a wide crossbar to grip and an easy-to-position pointer in a contrasting colour.

■ **Labelling** should be in contrasting colours, preferably with numbers, with an obvious symbol for the direction that increases speed.

■ **Rubber feet** add stability to the motor base.

3 Pulp container	4 Safety lid lock	5 Ease of use score (%)	6 Performance score (%)	7 Overall score (%)	Brand / model (in rank order)	
Inside		83	86	84	**PANASONIC** Household Juide Extractor MJ-66PR	
Outside	✓	75	85	78	**BREVILLE** Juice Fountain Professional JE90	
Inside	✓	75	79	76	**BRAUN** Multipress Compact MP75 Automatic Juice Extractor	
Outside	✓	70	85	75	**MOULINEX** 753	
Inside	✓	75	71	74	**RONSON** Vitajuice 2HD-8248	equal
Outside	✓	70	84	74	**SALTON MAXIM** Juiceman II JM2	
Inside	✓	75	61	71	**KENWOOD** Centrifugal Juicer JE350	
Inside	✓	70	69	70	**BREVILLE** Vitamax JEB55	
Inside	✓	68	71	69	**KENWOOD** JE550	
Inside	✓	68	69	68	**SUNBEAM** Pure Juice JE050 **(A)**	
Outside	✓	65	71	67	**PHILIPS** HR2825	equal
Outside	✓	65	71	67	**RONSON** Superjuicer 2HU-8246	
Outside	✓	68	56	64	**BREVILLE** Blend 'n' Juice Duo BJ100	
Inside	✓	60	59	60	**SUNBEAM** Juice 'n' Blend JB020	
Outside	✓	55	58	56	**TIFFANY** Juice Extractor JE603	

Which fruit?

We tested the juice extractors with carrots and apples (which are hard and produce a lot of dry pulp), pineapple and watermelon (a combination of hard and soft fruits), and oranges (which produce a lot of wet pulp).

Orange juice made in a juice extractor is generally frothier than squeezed oranges. And it takes more time to make — you have to remove all the white skin and fibres, which can leave a bitter or sour taste.

How to prepare them

For best results, use fresh and well-ripened fruit and vegetables. Wash them and trim away any discoloured or bruised sections.

Peel fruits with hard or inedible skin such as citrus fruit, pineapple, melon, kiwi fruit and uncooked beetroot. Only **BRAUN** recommends peeling and coring apples, but we got the same quality and quantity of juice with and without peel and cores, so you could save yourself the trouble. (Mind you — apple seeds do contain very small amounts of cyanide.)

Remove other hard parts such as stones from stone fruit, peel and pith from citrus fruit, and seeds from melon. Chop the fruit or vegies into chunks that'll fit easily in the feeder chute.

What to avoid

Starchy fruit and vegetables such as bananas and avocados are generally unsuitable for juicing. Some manufacturers also recommend avoiding other fruit like strawberries, pawpaw, mangoes, blackberries, currants, apricots, figs and rhubarb.

And for a few interesting combinations for tasty and refreshing juice, see *Juice recipes* on page 32.

1 Weight

The two juice extractors weighing more than 3 kg are the largest in the test. The small models weighing less than 2 kg would be suitable for a couple or single person — they can generally produce one or two glasses of juice before the pulp container is full. Most of those weighing 2–3 kg would suit a family. As far as size is concerned, all except the **BREVILLE Juice Fountain Professional JE90** should fit into a cupboard space fully assembled.

2 Juice jug

A blank in this column means the unit comes without a juice jug — you use your own. On some models, the jug slots into the unit (it's connected to it), which may be less messy because juice is less likely to splash onto the workbench; on others it's separate.

3 Pulp container

On some models, the pulp is collected around the sieve in a container inside the unit; on others the container is attached to it on the outside. See *What to look for* on page 33 for more on this.

4 Safety lid lock

This is an important safety feature that won't let you operate the juice extractor unless the lid's locked into place. All the tested models have it except the **PANASONIC**.

5 Ease of use score

We assessed how it easy it is to:

- Assemble and disassemble the unit.
- Use the controls.
- Clean all the parts.
- Collect the juice and remove the pulp.

6 Performance score

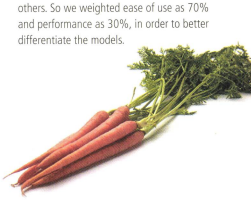
This includes our assessments of:

- Ease of juicing — how small the pieces have to be to fit into the chute.
- Quality of the juice — whether it's smooth, frothy, fibrous or has sediment.
- Problems with juicing — jamming, the sieve clogging, juice leaking or spraying and pulp accumulating around the lid.

See *Which fruit?*, left, for the fruit we used.

7 Overall score

Most of the juice extractors tested produced juice of similar quality and quantity, but some were much easier to use than others. So we weighted ease of use as 70% and performance as 30%, in order to better differentiate the models.



Car of the **future?**

HOLDEN

Faced with limited fossil fuel reserves and more stringent exhaust emission standards, car makers have to think about alternatives to the combustion engine. Here's what they've come up with so far.

IN BRIEF

- Hybrid cars with both a combustion and an electric engine are already in production overseas.
- Fuel-cell cars running on hydrogen should, by the end of the decade, be competing with conventional cars.
- Unfortunately, Australian consumers currently don't have access to production cars using the technologies mentioned in this article.

CITY TRAFFIC — A WEIRD CONCEPT at times, isn't it? Often there's one person (say, 50–100 kg) sitting in a chunk of metal (1–2 tonnes) behind other chunks of metal, breathing exhaust fumes and burning away the world's limited oil reserves.

Motor vehicles are the main culprits for air pollutants such as carbon monoxide (about 90% from vehicles), oxides of nitrogen (about 80%), hydrocarbons (about 40%) and particles (about 30%).

In addition, each litre of petrol burnt produces about 2.5 kg of greenhouse gases (carbon dioxide equivalents), and each litre of diesel almost 3 kg.

World oil reserves are finite, though experts don't necessarily agree on how long they'll last — 30, 40, 50 years or possibly more.

Some governments are forcing manufacturers to produce cleaner cars. For example, the European Union (EU) continues to introduce tighter exhaust emission requirements. And in California, 10% of all cars sold from 2003 onwards have to be *zero*-emission — vehicles that don't produce any air pollution during their operation.

Some manufacturers have increased engine efficiency (that is, decreased fuel consumption). For example, the VW Lupo turbo-diesel is the first passenger car to consume only 3 L/100 km. And there are a number of other small city cars using less than 5 L/100 km (most of them also with a diesel engine).

However, they still burn fossil fuel and can only delay the inevitable need for alternatives. And despite their greater efficiency, most of them still produce higher emissions than allowed by the strictest EU standard projected for 2005 — let alone by the Californian requirements.

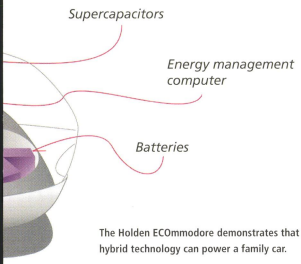
So what *are* the alternatives?

Electric cars

Some manufacturers have developed electric cars powered by large batteries. While there are specially designed models such as the General Motors EV-1 (sold in the US for the equivalent of about $55,000), most are based on existing combustion-engine models.

Pros

- True zero-emission vehicles if batteries are recharged with electricity from renewable sources (such as wind or sun).
- No exhaust emissions, reducing city air pollution.
- Very quiet.



The Holden ECOmmodore demonstrates that hybrid technology can power a family car.

Cons

- The batteries are very expensive, very heavy and some types have to be replaced every four to six years.
- Limited range (usually only between 100 km and 200 km per battery charge).
- No existing network of special charging stations to recharge the batteries, and charging takes a long time.
- If the electricity used to recharge the batteries is generated by burning fossil fuels, there are considerable carbon dioxide emissions.

Car of the future?

No. Consumer demand has been very low and manufacturers have almost stopped developing electric cars.

Hybrid cars

With hybrid cars, manufacturers have tried to overcome some of the problems of electric cars — mainly the limited range and lack of a recharging network.

Hybrid cars have two engines (a small combustion engine and an electric engine) and batteries (smaller and lighter than the ones in all-electric cars). The combustion engine is used to charge the batteries and to drive the car when necessary, considerably increasing the range. And you can simply refuel using the existing network of petrol stations.

The batteries and electric engine can be used for short trips — for example, in the city (reducing air and noise pollution where it matters most).

Pros

- Acceptable range.
- Doesn't require a new network of refuelling stations.
- During operation in electric mode, it's a zero-emission vehicle and very quiet.

Cons

- Only a medium-term solution, as it only reduces, but doesn't eliminate, fossil fuel consumption.
- Expensive. First-generation models (see below) are subsidised by manufacturers to make them affordable and kick-start consumer demand.

Car of the future?

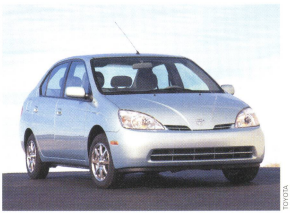
Hybrid cars may be a medium-term solution until alternatives become available that don't rely on fossil fuel.

The Toyota Prius and Honda Insight are available in Japan, Europe and North America for the equivalent of around $35,000. To date, more than 36,000 Prius and close to 3000 Insights have been sold. The real price is much higher, mainly due to their very expensive nickel-metal-hydride batteries. But manufacturers currently subsidise the cars. Both models may be released in Australia at a later stage.

Australia has taken a leadership role in hybrid technology. The CSIRO, together with more than 100 component manufacturers, has developed a prototype called aXcess 2. Unlike the Prius and Insight, it uses a comparatively cheap lead-acid battery and supercapacitors (a form of energy storage that can release the energy very quickly — for example, during acceleration).

While the aXcess has only been designed as a showcase of what's possible and won't go into production, its new technology may find its way into other cars.

For example, the Holden ECOmmodore concept car (see drawing, above) launched earlier this year



The first hybrid car in production, the Toyota Prius, has sold more than 36,000 to date.

HONDA

Australia in sight: The Honda Insight hybrid car may eventually be seen on our roads.

demonstrates that the CSIRO hybrid technology can be used in a full-sized family car, giving similar performance to combustion-engine models. Unfortunately, it's very unlikely the model will make it into production any time soon. However, some of the technologies improving the car's overall efficiency (such as the use of lightweight materials, better aerodynamics and reduced tyre rolling resistance) may find their way into future models.

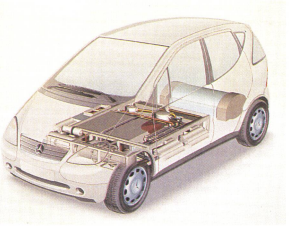
Fuel-cell cars

In a fuel cell, hydrogen combines with oxygen to form water, generating electricity in the process. There are no other emissions caused by the process itself.

However, the overall environmental impact of fuel-cell cars largely depends on how the hydrogen is produced: by using electricity to split water into hydrogen and oxygen (electrolysis), or by stripping it from natural gas or methanol.

Ideally, fuel-cell cars would fill up on hydrogen directly. However, early models will more likely produce the hydrogen from methanol or other fossil fuels in an onboard reformer.

The car of the future? Fuel-cell models such as the Daimler/Chrysler Necar 4 are expected to be available in a few years' time.



DAIMLER/CHRYSLER

Electrolysis can be both best and worst in terms of carbon dioxide production — depending on whether the electricity is produced from renewable or fossil fuel sources.

Some fuel-cell cars are being developed in partnerships between car manufacturers and oil companies because, depending on the hydrogen source, a new network of refuelling stations will be needed.

Pros

- No in-use emissions when fuelled with hydrogen directly.
- True zero-emission vehicle if the electricity used to generate hydrogen comes from renewable sources.

Cons

- Several times more expensive than conventional engines.
- Unless the hydrogen is stripped from petrol onboard the car, a new refuelling network (for example, for methanol) is required, or existing petrol stations need to be refitted.
- Generating hydrogen from fossil fuels is only a mid-term solution.
- Storage and handling of liquid hydrogen is very complicated.

Car of the future?

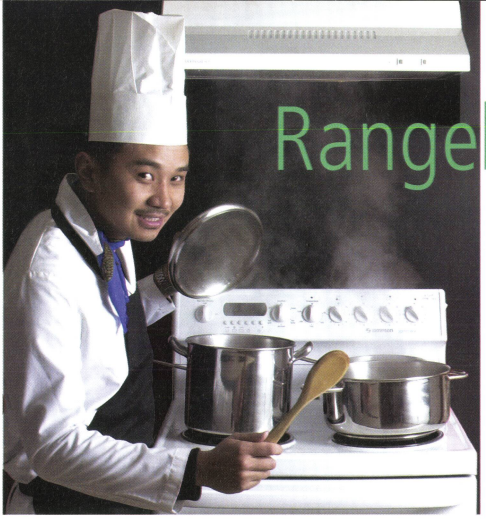
Possibly. A study carried out by the German EPA concludes that even if fuel cells became much cheaper, developing petrol-driven cars conforming with the strictest European and US emission standards would be a cheaper way to achieve the same environmental outcome.

However, while that may solve the problem of greenhouse gases and other air pollution, it doesn't get round the issue of finite fossil fuel reserves.

Many of the major car manufacturers have developed fuel-cell prototypes and hope to go into production by 2003 or 2004.

For example, the Daimler/Chrysler Necar 4, released in 1999 and based on the Mercedes A-class compact model, demonstrates that fuel cells can be built compact enough to leave enough space for five passengers plus luggage in a relatively small car. It's supposed to be trialled in the US next year.

While it's likely manufacturers will need to subsidise the more expensive technology initially, some expect prices to be comparable to conventional cars by 2010. ❑



Rangehoods

If someone in your household likes kippers for breakfast, you'll definitely want a rangehood to suck away that unmistakable fragrance.

WHETHER YOU FREQUENTLY cook up a storm or just the odd smelly dish, a rangehood could save the day. We tested 17 models — four fixed and 13 retractable — in both ducted and recirculating modes.

Rangehoods aren't complicated to use or to install, though you'll need an electrician for a power point if there isn't one handy. Retractables are slightly less obtrusive, and the light and fan come on when you pull out the front panel, though they're not nearly as easy to clean as the fixed models we tested.

You may need someone to knock a hole in the wall or ceiling if you want to duct the smelly air outside. If you live in an apartment it probably can't be ducted, so you'll need to use a carbon filter that absorbs odours while recirculating the air. They're a bit noisier in recirculating mode.

WHAT TO BUY

This list is divided according to the models' overall scores in each mode: recirculating and ducted.

Ducted

ROBINHOOD RA6WH	$99
FISHER & PAYKEL RH600	$239
SIMPSON RCN6W*11	$159

Recirculating

WHIRLPOOL AKR 628 WH	$229
WHIRLPOOL AKR 630/WH	$299
CHEF RR3C61BL	$350
SMEG SA 480T	$359

Installation

You'll probably need an extra pair of hands to help install a rangehood. Here are a few hints for despair-free installation:

- Read the instructions carefully first. Some manufacturers supply a template that can be used to mark the location for the supporting holes either on the wall or the kitchen cabinet. If not, the rangehood itself can be used for this. Get help holding the unit in position while marking the position for the holding screws.
- Pay particular attention to the minimum distance between the rangehood and the heat source — all instructions give a minimum required distance between the hotplate and the bottom of the hood. For safety reasons, this distance is usually more when cooking with gas than electricity.
- All the models came with a power cord and plug.

Continued on page 41

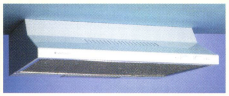
IN BRIEF

- All the tested models work as either recirculating or ducted rangehoods. Most perform better in ducted mode; six scored the same in each mode.
- You need to be clear before you buy if you can or need to use ducting because you'll have to buy it separately.
- If there's no power point close by, you'll have to get an electrician to install one.
- They're all fairly noisy with the fan on high, and carbon filters (used in recirculating mode) make them even noisier.

PROFILES

The models in the *What to buy* list are profiled in rank order. Prices shown are a good target to aim for, based on checks in August 2000. Anything lower is a bargain.

THE BEST IN DUCTED MODE


VANESSA MARSHALL

ROBINHOOD RA6WH

Target price: $99
Type: Fixed

GOOD POINTS

- Very good steam extraction in ducted mode, and good in recirculating mode.
- Comparatively low power consumption.
- Filter is easy to access but fiddly to clean due to its large size.
- Exterior is easy to clean.
- Control switches are on the front panel and easy to operate.

BAD POINTS

- Noisy, particularly in ducted mode.
- Light globe is inconvenient to replace.

VANESSA MARSHALL

FISHER & PAYKEL RH600

Target price: $239
Type: Fixed

GOOD POINTS

- Very good steam extraction in ducted mode, and good in recirculating mode.
- Comparatively low power consumption.
- Filter is easy to access but fiddly to clean due to its large size.
- Exterior is easy to clean.
- Touch-control switches are on the front panel and easy to operate.

BAD POINTS

- Noisy in both ducted and recirculating modes.
- Light globe is inconvenient to replace.

VANESSA MARSHALL

SIMPSON RCN6W*11

Target price: $159
Type: Fixed

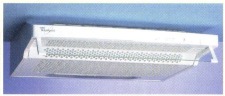
GOOD POINTS

- Very good steam extraction in ducted mode, and good in recirculating mode.
- Filter is easy to access, but fiddly to clean due to its large size.
- The exterior is very easy to clean.
- Control switches are on the front panel and easy to operate.

BAD POINTS

- Light globe is inconvenient to replace.

THE BEST IN RECIRCULATING MODE


VANESSA MARSHALL

WHIRLPOOL AKR 628 WH

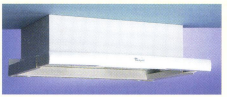
Target price: $229
Type: Fixed

GOOD POINTS

- Very good steam extraction in both ducted and recirculating modes.
- Filter is easy to access but fiddly to clean due to its large size.
- Exterior is easy to clean.
- Control switches are conveniently located on the front panel, though a little stiff to move.
- Light provides good visibility over the cooking area.
- Easy to change light globe.

BAD POINTS

- Comparatively high power consumption.
- Noisy, particularly in recirculating mode.


VANESSA MARSHALL

WHIRLPOOL AKR 630/WH

Target price: $299
Type: Retractable

GOOD POINTS

- Very good steam extraction in both ducted and recirculating modes.
- Comparatively quiet, particularly in ducted mode.
- Controls are easy to use and conveniently located on the outside of the front panel.
- Retractable hood automatically turns the fan/light on when you pull the hood panel out.
- Light provides good visibility over the cooking area.

BAD POINTS

- Comparatively high power consumption.
- Difficult to clean the hood, and the glass panel is fixed so can't easily be completely cleaned .
- Light globe is inconvenient to replace.

VANESSA MARSHALL

CHEF RR3C61BL

Target price: $350
Type: Retractable

GOOD POINTS

- Very good steam extraction in both ducted and recirculating modes.
- Comparatively low power consumption.
- Filter is easy to access and clean.
- Retractable hood automatically turns the fan/light on when you pull the hood panel out.

BAD POINTS

- Noisy in both ducted and recirculating modes.
- Difficult to clean the underside of the hood, but the glass in the pull-out panel can be removed.
- Controls are poorly located on the underside of the hood.
- Light globe is inconvenient to replace.

Continued from page 39

What about the rest?

Ducted

■ The **ROBINHOOD Royale RR6WH** removed steam as well as the three in the *What to buy* list, but it's noisier and not quite as easy to use. The two **WHIRLPOOL**s and the **ARISTON** also performed reasonably well. You'd probably be fairly happy with any of these four, especially if you found them on special.

■ Of the rest, performance is lower again and ease of use not as good as the models in the *What to buy* list. If noise is your major concern, though, the **KLEENMAID** could be worth trying.

Recirculating

■ Steam removal performance dropped off considerably after the four models in the *What to buy* list. If noise is your major concern you could try the **BOSCH**, while the **ROBINHOOD RA6WH, SIMPSON RCN6W*11** and **FISHER & PAYKEL RH600** are the easiest to use.

VANESSA MARSHALL

SMEG SA 480T

Target price: $359
Type: Retractable

GOOD POINTS:

■ Very good steam extraction in both ducted and recirculating modes.

■ Filters are easy to remove, though a bit fiddly to replace.

■ Retractable hood automatically turns the fan/light on when you pull the hood panel out.

■ Light provides good visibility over the cooking area.

BAD POINTS

■ Comparatively high power consumption.

■ Noisy in both ducted and recirculating modes.

■ Difficult to clean the underside of the hood, but the glass in the pull-out section can be removed.

■ Controls are cramped and stiff to operate.

■ Light globe very fiddly to replace.

Ducting

None of the models in our test comes with ducting, so if you need it you'll have to buy it separately.

■ Install it via the shortest route using straight, non-flexible ducting if possible — flexible ducting causes air turbulence, reducing the efficiency of the fan.

■ Don't duct the unit so the steam and odours vent into the ceiling or wall cavity (you don't want to cause condensation problems) or an existing chimney that carries combustible products from other sources; the air should be ducted outside. Some kits (like the Uniduct) suggest you duct it inside, but we'd advise against it.

We paid $50 for a Uniduct vertical kit, which could be used for all the tested models that require rectangular ducting. For the others, you can buy 100 mm or 125 mm pipe, which might cost about $10–20 for the right length.

Filters

The metal mesh filters that come with the retractable units for use in ducted mode are fairly easy to clean in the kitchen sink. The filters on the fixed models are larger and some can be quite difficult to wash this way. Only one model in this test comes with a disposable filter — the **BOSCH DHI625BAU**. Carbon filters (to absorb odours) for recirculating mode aren't included in the purchase price.

Some manufacturers don't suggest how often the carbon filter should be replaced. It really depends on how much cooking you do, particularly oily or greasy cooking, so it's probably fair for you to be the judge. It's not difficult to have a look at the filter now and then to check.

The following models need two carbon filters, side by side: **ARISTON ARS6ix, FISHER & PAYKEL SO600, WHIRLPOOL AKR 630/WH, TECHNIKA SL2/02, ROBINHOOD RA6WH** and **BLANCO RHT6SL1**. This makes the **WHIRLPOOL, FISHER & PAYKEL** and **ARISTON** models the most expensive in terms of ongoing costs (see the table on page 42 for details).

Continued on page 43

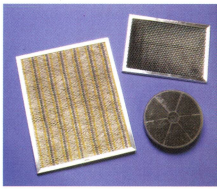
Noise

Most of the rangehoods are pretty noisy, especially with their fan on the highest setting. Some were so noisy it'd be hard to hold a conversation in the same room without raising your voice, which is why we've included noise in the scoring model. Fortunately you may not need to use the fan on the highest setting all the time.

The **KLEENMAID** was the quietest in ducted mode, and the **BOSCH** and **OMEGA** in recirculating mode.

SAFETY

All the units passed the electrical safety tests. If, however, you have flued gas or slow-combustion heating in an area close to the kitchen, you must ensure there's adequate air venting so that cooking fumes aren't drawn down the heating flue. Some manufacturers' instructions carry this type of warning.



Different types of carbon filters.

POWER

Some of the models in this test have one fan and others have two. Our test shows there's no correlation between performance and the number of fans or wattage.

Ducted rangehoods

	Brand / model (in rank order)	Manufacturer/ distributor	Origin	Target price ($)*	Warranty (years)	Type	Number of fan speeds	Glass panel (fixed or removable)	Control location	Ease of use score (%)
	ROBINHOOD RA6WH	Robinson	NZ	99	2	Fixed	2		Outside, front panel	80
equal	**FISHER & PAYKEL** RH600	Robinson	NZ	239	1	Fixed	3		Outside, front panel	80
	SIMPSON RCN6W*11	Email	Australia	159	2	Fixed	2		Outside, front panel	80
	ROBINHOOD Royale RR6WH	Robinson	NZ	439	2	Retractable	3	Removable	Under hood, back	73
equal	**WHIRLPOOL** AKR 628 WH	Whirlpool	Italy	229	2	Fixed	3	Fixed	Outside, front panel	75
	WHIRLPOOL AKR 630/WH	Whirlpool	Italy	299	2	Retractable	2	Fixed	Under hood, side	60
	ARISTON ARS6ix	Robinson	NZ	457	5	Retractable	3	Removable	Under hood, back	65
	KLEENMAID RH1A	Kleenmaid	Italy	369	5	Retractable	2	Fixed	Outside hood, side	60
equal	**FISHER & PAYKEL** SO600 **(A)**	Robinson	NZ	349	1	Retractable	3		Under hood, side	75
	CHEF RR3C61BL	Email	NZ	350	1	Retractable	3	Removable	Under hood, side	70
equal	**SMEG** SA 480T	Omega	Italy	359	2	Retractable	3	Removable	Outside hood, side	68
	TECHNIKA SL2/02	Technika	Italy	399	2	Retractable	3		Under hood, front	68
	BOSCH DHI625BAU **(A)**	Bosch	Germany	327	2	Retractable	3	Removable	Outside hood, front	78
	SIMPSON Thinline RCHR6W*10	Email	Australia	255	2	Retractable	3		Outside, front panel	73
	OMEGA OA 412 FR	Omega	Italy	329	2	Retractable	3	Removable	Outside hood, side	68
	BLANCO RHT6SL1 **(A)**	Blanco	Italy	375	2	Retractable	2	Fixed	Under hood, side	70
	ANDI H5916	Andi	Italy	305	2	Retractable	3	Fixed	Under hood, side	60

* Prices shown are a good target to aim for when shopping around, based on checks in August 2000.
(A) This model has now been discontinued, but may still be available in shops.

Recirculating rangehoods

	Brand / model (in rank order)	Carbon filter costs per year ** Replaced once ($)	Replaced twice ($)	Ease of use score (%)	RECIRCULATING MODE Noise (max, dB)	Noise score (%)	Performance score (%)	Overall score (%)*	
	WHIRLPOOL AKR 628 WH	30	60	75	63	62	75	72	
	WHIRLPOOL AKR 630/WH	60 **(B)**	120 **(B)**	60	60	68	70	68	
equal	**CHEF** RR3C61BL	40	80	70	66	57	70	67	equal
	SMEG SA 480T	39	78	68	65	59	70	67	
	BOSCH DHI625BAU **(A)**	50	99	78	59	69	60	65	
equal	**ROBINHOOD** RA6WH	30	60	80	61	66	60	65	equal
	SIMPSON RCN6W*11	28	55	80	62	64	60	65	
	FISHER & PAYKEL RH600	32	64	80	64	61	60	64	
	ROBINHOOD Royale RR6WH	14	27	73	70	50	60	61	
	OMEGA OA 412 FR	29	58	68	59	69	55	60	
equal	**TECHNIKA** SL2/02	34 **(B)**	68 **(B)**	68	62	64	55	59	equal
	KLEENMAID RH1A	17	34	60	60	68	55	59	
	ANDI H5916	21	42	60	65	59	55	57	
	SIMPSON Thinline RCHR6W*10	28	55	73	60	68	40	52	
equal	**FISHER & PAYKEL** SO600 **(A)**	90 **(B)**	160 **(B)**	75	63	62	40	51	equal
	BLANCO RHT6SL1	42 **(B)**	84 **(B)**	70	61	66	40	51	
	ARISTON ARS6ix	66 **(B)**	132 **(B)**	65	66	57	40	48	

** Prices for carbon filters are the price we paid and have been rounded to the nearest dollar.
(B) Two filters, side by side.

6	6	7	8		
DUCTED MODE					
se , dB)	Noise score (%)	Performance score (%)	Overall score (%)*	Brand / model (in rank order)	
	61	80	76	**ROBINHOOD** RA6WH	
	57	80	75	**FISHER & PAYKEL** RH600	equal
	68	75	75	**SIMPSON** RCN6W*11	
	54	80	73	**ROBINHOOD** Royale RR6WH	equal
	66	75	73	**WHIRLPOOL** AKR 628 WH	
	73	75	72	**WHIRLPOOL** AKR 630/WH	
	64	75	71	**ARISTON** ARS6ix	
	80	70	70	**KLEENMAID** RH1A	
	64	70	70	**FISHER & PAYKEL** SO600 **(A)**	equal
	61	70	68	**CHEF** RR3C61BL	
	62	70	68	**SMEG** SA 480T	equal
	61	70	68	**TECHNIKA** SL2/02	
	73	60	66	**BOSCH** DHI625BAU **(A)**	
	68	60	64	**SIMPSON** Thinline RCHR6W*10	
	71	55	61	**OMEGA** OA 412 FR	
	66	55	60	**BLANCO** RHT6SL1 **(A)**	
	61	55	57	**ANDI** H5916	

OUR TEST

The rangehoods were installed 700 mm above the top of the stove, about the mid-range height recommended by manufacturers. We tested them in both recirculating and ducted modes, simmering water in two saucepans on the two rear hotplates, and simmering water in four saucepans.

Continued from page 41

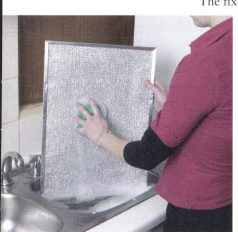
Prices for carbon filters varied (see the table, far left, for details). Check their availability when looking at rangehoods because you may have to buy them from specialist shops and they may need to import them. (For example, we waited up to six weeks for some, and didn't always get the right one.)

Cleaning

Retractable models have plenty of dirt and grease traps so they're fairly difficult to clean. The fixed units are much easier.

Some have the controls on the underside of the hood (over the cooking area), so they'd get pretty dirty as well.

The glass panel in the front part of the hood on some retractable models can't be removed and doesn't pull out far enough to easily clean all of it — a less than sensible design that's easily avoided. See the table, above, for which ones. ❑



The large mesh filter in a fixed rangehood can be fiddly to clean.

1 Type

Rangehoods are either fixed, covering most of the stove area; or they're retractable, with the hood separated into two parts. One part is fixed and the other can be pulled out to cover the stove area, turning the fan and light on, and pushed back in, turning the fan and light off.

2 Number of fan speeds

Rangehoods usually have one or two fans, which seems to make no difference to their performance (see *Power*, page 41). They can also have two speeds (high and low) or three. We tested on the highest speed.

3 Glass panel

Some of the retractable hoods have a glass panel in the movable part that pulls out to operate the fan and light and cover the stove area. On some of these the glass panel can be easily removed for cleaning, while on others it can't, overlapping slightly with the fixed part and creating an area that would get quite dirty and greasy and be very difficult to clean.

4 Control location

The location of the controls varies, and some (particularly those under the hood) are much less accessible than others.

5 Ease of use score

This includes the ease of cleaning the rangehood and filter, as well as using the controls.

6 Noise measurement and score

Noise for all the models was measured at a height of 1.6 m and 1 m from the front edge of the rangehood, with it on the highest fan setting. We included noise in the scoring model because some are very loud, though you probably wouldn't need to run them on full all the time. See *Noise* on page 41 for more.

7 Performance score

All the models were scored for their performance in both ducted and recirculating modes. The scores are presented separately: performance and noise scores in ducted mode are in the main table, and in recirculating mode in the smaller table. See *Our test*, left, for more on the test method.

8 Overall score

This score consists of:

- Performance: 60%.
- Ease of use: 20%.
- Noise: 20%.

Exterior — most are worth

Year three of our test finds just a couple more paints best left on the shelf.

IN BRIEF

- So far we've found seven paints it's not worth dipping your brush into; see right.
- All the dark green enamel paints have lost most of their gloss by now and the white enamels aren't that far behind.
- Painting tips: making a long, hard job worthwhile — page 46.
- Keeping yourself and the environment safe; see *The clean-up*, page 47.
- Danger, danger — lead, and how to deal with it; page 47.

THE GREAT OUTDOORS IS DEFINITELY part of the Australian lifestyle, and judging by our test results, most exterior house paints don't mind a bit of sun either. After nearly three years into our outdoor exposure test of more than 100 paints, only seven can't be recommended. A further two are best suited to timber only.

Good news

The most important job paint does is protecting the building material it's applied to. So any blistering, cracking, flaking or erosion in the paint film is a serious structural failure that could cause major damage. Timber is especially vulnerable and expensive to repair.

The good news is that most Australian exterior house paints, when used properly, will give at least six years' good service (see *Our test*, far right).

As most paints in our test are still going strong at the three-year mark, it's still too early to say which will really last the distance, so we haven't listed their performance in a table. Nevertheless, it's not a smooth, glossy finish for all paints.

Not such good news

At this stage of the test, **LIVOS Vindo Enamel Paint** (green) and **LIVOS Vindo Coating Varnish** (white) are the only paints to show serious cracking. And it's particularly poor that they cracked after just one year on test (as reported previously).

Perhaps the 'natural' solvent-free formulations in these paints just aren't up to the job. Our advice: don't buy them.

Dull *adj*: 1. not intense, bright or sharp; dim

A very premature gloss loser was **BIO 8 Different Colours Enamel Lacquer** (green) — losing 97% of its gloss and rating poorly for colour change after just one year on test.

Other early gloss losers that we couldn't recommend are **TAUBMANS High Gloss Ultra Enamel** (since reformulated, according to the manufacturer) and **BERGER Full Gloss Enamel**. These two green enamels lost, respectively, 82% and 73% of their gloss on timber, also after just one year. Considering that you buy enamels for that shiny glossy finish, they put in a rather, well, dull performance.

All the other green enamels now rate similarly in terms of gloss loss, in line with their general lower durability (see *Which paint where?*, page 47). If you want a marginally longer-lasting gloss shine, our test results suggest you need to choose a light colour.

paints a brush!

VANESSA MARSHALL

Paint safe

Painting your home is potentially risky for both you and the environment. Here's how to minimise those risks:

- Paints contain **VOCs** (volatile organic carbons); these chemicals are responsible for the headaches, dizziness and nausea of painters' syndrome. They've also been implicated in various health conditions of the skin, liver, lungs and reproductive systems, and they contribute to photochemical smog. However, Australian paints contain relatively low amounts of VOCs and occasional exposure to them (such as when you paint your home) is thought to present only a very small health risk.
- Choosing **acrylic paints**, where possible, will help to reduce the risk. Acrylics contain around 6–8% VOCs, while enamel paints contain 30–40%.
- Further minimise the risk by ensuring adequate ventilation and wearing protective clothing such as rubber gloves, overalls and safety glasses.

OUR TEST

When the weather turns nasty we head for cover, but paints are stuck in the burning sun and driving rain. And the test makes it even tougher for the painted test panels by inclining them at 45° facing north, accelerating their ageing — three years in these harsh conditions roughly equates to six years on your house.

We applied acrylic (water-based) and enamel (oil-based) paints to timber and fibro panels according to manufacturers' directions and the relevant Australian standard for exposure testing.

We've tested all finishes in white and the nearest colour to Brunswick green (to show the effects of ageing on both light and dark colours), made by the following manufacturers.

- Berger
- Bio
- Bristol
- British Paints
- Dulux
- Duralex
- Haymes
- Home
- Livos
- Pascol
- Solver
- Taubmans
- Walpamur
- Wattyl
- White Knight Paint.

If you must have that shiny dark heritage colour on your letterbox or door, **WATTYL High Gloss Enamel** is, narrowly, the best gloss enamel performer. On timber, it's retained 5% more gloss than any other paint. This doesn't necessarily make it a brilliant performance, considering that in three years it's lost 85% of its original gloss.

What colour *was* that?

Choosing a colour can be frustrating but rewarding work, so when you finally settle on one, you want it to stay its original shade. You definitely don't want it to change colour too severely or unsightly colour contrasts could develop.

WHAT ***NOT*** TO BUY

- **LIVOS Vindo Enamel Paint** (green)
- **LIVOS Vindo Coating Varnish** (white)
- **BIO 8 Different Colours Enamel Lacquer** (green)
- **BERGER Full Gloss Enamel** (Brunswick Green)
- **TAUBMANS High Gloss Ultra Enamel** (Brunswick Green) — since reformulated, according to the manufacturer
- **DULUX Timbercolour Gloss Acrylic** (Brunswick Green) **(A)**
- **SOLVER Low Sheen Duraguard** (Deep Brunswick Green)

(A) The Timbercolour range has now been discontinued.

These are the paints that have made it onto our 'not recommended' list over the past three years — see left for why.

TIM TURNER

Keep these paints off your brush!

The dirt pick-up on Solver Low Sheen Duraguard and Taubmans Low Sheen Timbertop Acrylic white paints (centre panels) doesn't make them the best choices for brick. However, this could mean that on timber they could have the advantage of slightly more flexibility (see *A dirty question?*, right, for more on this).

This year, **SOLVER Low Sheen Duraguard** (Deep Brunswick Green) and **DULUX Timbercolour Gloss Acrylic** (Brunswick Green) rated much worse for colour change than the other dark green acrylics. So we can't recommend them. And as with gloss performance, the vast majority of dark-coloured enamel paints have now performed poorly in terms of colour change. White enamel paints have done much better, so if you're choosing enamel, opt for the lightest colour possible.

A dirty question?

Timber is a notoriously high-stress surface for paint because it expands and shrinks with changes in heat and humidity. So a potential advantage of a softer paint (generally an acrylic — see *Which paint where?*, far right) is its ability to cope with the natural movement of timber. Unfortunately, there's also a downside — the softer the paint, the more dirt will settle into it.

If you're painting a more stable building material, like brick, it makes sense to avoid light-coloured paints that are too 'soft' and could become relatively dirty.

This year we found that **SOLVER Low Sheen Duraguard** and **TAUBMANS Low Sheen Timbertop Acrylic** white paints were consistently dirtier than other white acrylics (see the photo, left). This doesn't make them poor paints, just better suited to exterior timber than to brick or concrete.

Doing it yourself?

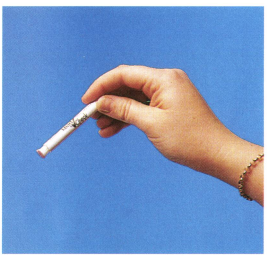
You have to know what you're doing to save money and avoid costly mistakes. Here are some basic tips:

- **Pre-painted surfaces.** Whether to paint over or strip back depends on the condition of the existing paint. If it's badly cracked or peeling, it has to be removed — otherwise the new paint simply won't last. If the old surface is mostly intact, deal with minor flaws by scraping and sanding back. If there are some suspect areas, apply the adhesion test by cutting several small crosses with a knife, pressing adhesive tape over them and quickly pulling it off. If any paint comes away, you need to strip back.
- **New paint.** New paint needs to be compatible with the paint underneath it. You can apply a new acrylic paint over an existing enamel (if it's in good condition and isn't glossy) — but *not vice versa* unless you use a specially formulated enamel. If you don't know what type of paint you're covering, dab some methylated spirits onto it — acrylics will come off slightly, enamels won't.
- **Stripping.** Strip back large areas by using a heat gun (to soften the paint before scraping), an orbital or disc sander or a specially formulated chemical paint stripper.
- **New or unpainted surfaces.** If you're painting a new or formerly unpainted surface, preparation is just as important. To maximise its life, avoid painting over weathered or grey timber. Sand it back to make the job last. If the timber is very new, it may need a primer to reduce the risk of resin bleed. For brick or masonry, make sure the surface is clean and not crumbly.
- **Mixing the paint.** It might sound obvious, but mix the paint very carefully using a long flat paddle, mixing upwards with semi-circular strokes.
- **Weather.** Avoid painting in high humidity and direct sunlight (especially in summer) and when the temperature is under 10°C.
- **Undercoats.** If you're using a gloss or semi-gloss acrylic, use an undercoat and sand it back to a smooth finish for best gloss results. An undercoat is optional if you're using flat or low-sheen acrylics. For enamel paints, you need a primer and undercoat on exterior unpainted surfaces and an undercoat only for interior surfaces.
- **Mould.** It's important to treat mould if it's present. Wash down with a proprietary mould remover, or make your own by mixing one part household bleach (containing sodium hypochlorite) with three parts water.

Danger, danger — lead!

Lead is still a significant environmental hazard, particularly for children. Any house painted before 1970 could have lead-based paint hanging around. If you suspect existing paint contains it, a lead test kit (available from some manufacturers and specialist paint stores) will help you find out. If existing paint does contain lead, follow these guidelines:

- Intact and stable lead-based paint films don't present a hazard unless disturbed — so don't. You can safely paint over them.
- If you have a strip off the lead paint, wear protective overalls, disposable overshoes and a half-face respirator that meets Australian Standard AS 1716 (1994) — check the packaging. Young children, pregnant women and pets should leave the home while you're stripping lead paint.
- Don't use heat-stripping methods because they may generate toxic lead fumes. Instead, remove the paint by scraping and sanding, *keeping all surfaces wet.*
- When working outside, collect wet scrapings on a groundsheet to prevent soil contamination. When stripping inside, seal entrances with two lengths of plastic sheeting overlapped in the middle. Empty the room of all movable contents, cover the floor with plastic sheeting and tape it to the bottom of the walls. Other immovable surfaces should also be covered. When you've finished, wrap the plastic sheet up securely. In most states, small quantities of lead-contaminated paint may be disposed of in household garbage, but large quantities should go to an appropriate waste disposal facility. Contact your local council for advice.
- More comprehensive information is available from the Environment Protection Authority (or environment agency) in your state or territory.



Get a lead test kit to find out for sure if you think any old paint you're dealing with might contain lead.

Which paint where?

- **Acrylic:** These days acrylic (water-based) paints have definitely won the consumer over because they're so much easier to use, particularly cleaning up afterwards. They use a different polymer technology from enamel paints and don't harden excessively, and so retain flexibility and cope better with any dimensional changes in the underlying building material, especially when timber expands and contracts. They're also safer for you and the environment (see *Paint safe* on page 45) as well as offering superior durability.

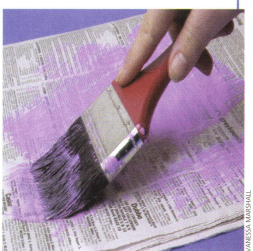
  In fact, the Australian standard for painting buildings nominates acrylic paint for most exterior areas, though it also recommends enamels on window frames and other trim areas.
- **Enamel:** The resins in enamel paints continually harden with age, making them more prone to cracking and flaking. It also causes lighter-coloured enamels to 'yellow'. But continual hardening also makes them hard-wearing and non-stick, definite advantages on doors and window frames.

  So for doors and windows the choice is yours between the ease of use and likely good timber protection of acrylics versus the hard-wearing and non-stick properties of enamels.

The clean-up

Painting is messy enough: don't make it worse. Here's how to keep your act clean.

- Never pour leftover paint, or thinners, down *any* drain.
- Buy only what you need — estimate your needs and talk to your retailer. Save any leftover paint for touch-ups (both enamels and acrylics will keep) or donate it to a friend, neighbour or community group.
- Minimise paint run-off when washing brushes and rollers. First, scrape as much paint as possible back into the can, wiping excess paint onto newspaper. Soak brushes in turps (for enamel paint) or water (for acrylics); then, again, wipe as much paint off as possible.
- Give brushes and rollers a final wash in hot water and detergent, and a cold-water rinse.
- Store turps or water used to soak brushes in a tightly sealed jar for a fortnight or so to allow paint solids to settle. You can keep the clear turps for your next paint job. Let the sediment dry out before cracking and peeling it off, and you can then dispose of it in your household garbage.



VANESSA MARSHALL

RECALLS & BANS

If you find a recall or ban not on our list, please let us know. Companies often rent 1800 numbers for a couple of months after the recall is announced. If the number given is no longer operating, phone the manufacturer or retailer direct.

THE PRODUCT: DaimlerChrysler has recalled some 1997, all 1998 and some 1999 **XJ Jeep Cherokee vehicles**. Model year details can be found on a plate on the inside left-hand front door. Owners of 1997 and 1999 models should contact an authorised Chrysler Jeep dealer and provide their VIN number (viewed through the windscreen on the dash fascia) to determine whether or not their vehicle is subject to the recall.

The problem: The airbag control module may corrode internally due to water intrusion, possibly causing the illumination of the airbag warning light or the airbag itself to deploy without warning.

What to do: Should the airbag warning light remain illuminated after initiallly starting the vehicle, contact your nearest Chrysler Jeep service centre immediately. Owners of recalled vehicles should, in any case, arrange for an inspection by an authorised dealer. Any necessary modifications will be carried out free of charge. All known owners are being contacted by mail. For further information, or to have an inspection arranged on your behalf, contact DaimlerChrysler on 1800 680 077.

THE PRODUCT: Bridgestone Australia has recalled the following **Firestone tyres**:

Tyre size:

- P235/75R15 (15 inch diameter 4WD tyres).

Pattern:

- Radial ATX.
- Radial ATX II.
- Wilderness AT (only those starting with the letters 'VD' after the 'DOT' marking).

Production date: 1990–2000.

The problem: A small number of tyres have experienced tread separation while in use. When under-inflated, all radial tyres generate excessive heat, which is exacerbated in warmer conditions and might lead to tread separation and potential loss of vehicle control.

What to do: Maintain tyre pressure as specified on the vehicle tyre placard and don't travel at speeds greater than 60 km/h until the tyres are replaced. Contact your nearest Bridgestone Tyre Centre on 13 12 29, SteelCat Tyre Centre on 13 62 28 or Firestone Key Dealer on 13 63 47 for inspection and replacement of the tyres at no charge. For further information call 1800 354 864 or go to www.bridgestone.com.au.

THE PRODUCT: Roger Armstrong has recalled **Gerry Trail Tech Backpack Baby Carriers** sold between 1996 and 1999. The carriers feature a removable washable seat, a storage pouch, a loading stand and a padded hip belt. The word "Gerry" is imprinted on the plastic frame and also embroidered on the seat.

The problem: The size of the leg openings in the carrier may allow an infant to slip through.

What to do: Stop using the product. Contact Roger Armstrong immediately on 1800 062 484 to arrange for the return of the carrier free of charge. The necessary modifications will be made and the baby carrier returned to you.

THE PRODUCT: Mattel has recalled the **Fisher-Price Lift & Lock Swing**. An outdoor swing for children aged 9 months to three years, the swing has a red, green or purple seat, blue ropes and a yellow plastic T-shaped restraint shield to hold children in the seat. The model number (2092, 72092, 75960, 75970, 75973 or 75980) is moulded into the back of the seat.

The problem: Children can manoeuvre out of the restraint and fall out of the swing, risking injury.

What to do: Don't use the swing. To provide additional safety, Mattel will provide a free restraint kit with a supplemental waist and crotch restraint belt. For further information or to receive your free restraint kit, phone 1800 674 753, 9am – 5pm (EST) Monday to Friday.

THE PRODUCT: Cathay Wholesale has recalled the following pills used by herbal practitioners:

- **Chuan Xiong Cha Tiao San Pills** — Aust L. No. 42653. Batch 05303, expiry 05/2003.
- **Xiao Qing Long Wan Pills** — Aust L. No.11727. Batch 07195, expiry 07/2002.
- **Xuan Bi Tang Pills** — Aust L. No.11737. Batch 05/00, expiry 05/2002; Batch 05200, expiry 05/2003.
- **Xin Yi San Pills** — Aust L. No.11736. Batch 12/199. Expiry 12/2000; Batch 06199, expiry 06/2003.
- **Xiao Feng San Pills** — Aust L. No.11725. Batch 08/193, expiry 08/2000; Batch 09/193, expiry 09/2000; Batch 07/193, expiry 05/2003.

The problem: Testing has found that the product contains aristolochic acids, which are not constituents of the listed ingredients and are considered to be toxic.

What to do: Do not take the pills. Herbal practitioners are contacting patients who may have been supplied with these products. For further information call Cathay Wholesale on (02) 9212 5151 (if calling from Sydney) or 1800 622 052 from other areas.

THE PRODUCT: Land Rover Australia has recalled **Land Rover Freelander vehicles** with a compliance plate date between December 1997 and July 2000. The compliance plate can be found at the front of the vehicle, just above the dashboard and can be viewed through the windscreen.

The problem: The child restraint anchor fittings may have been incorrectly installed. In the event of sudden deceleration or impact, the anchor fitting may twist sideways causing inadvertent loosening of the child restraint harness.

What to do: If possible, avoid using a child restraint in the vehicle and contact an authorised Land Rover dealer immediately to arrange an inspection and appropriate alteration free of charge. Alternatively, you may contact Land Rover Australia Customer Response Centre on 1800 625 642 and an inspection will be arranged for you.

Weekly updates of recalls and bans are posted on the CHOICE website at www.choice.com.au. You can also email us any recalls or bans not on this list at ausconsumer@choice.com.au.

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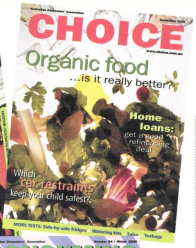

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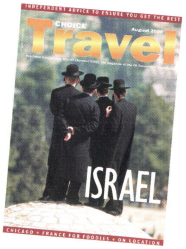

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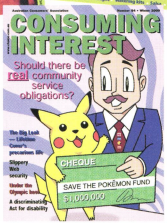

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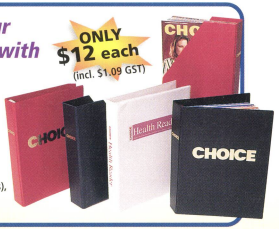

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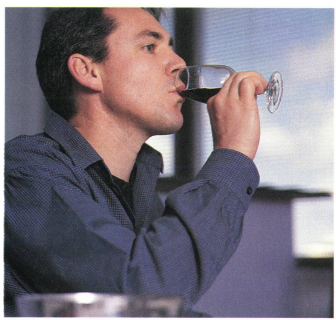

A wine expert tasting one of the shirazes for our upcoming wine article.

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NOVEMBER 1999 — OCTOBER 2000

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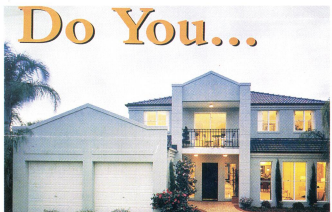
Pull the other one

The latest from the genetic engineers? Four-legged chickens — so no more fighting over who gets the drumsticks!



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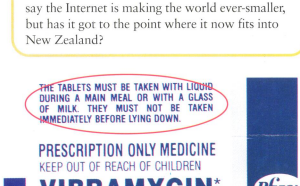
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100mg
DOXYCYCLINE TABLETS
Pfizer
7 TABLETS EACH CONTAINING
AVOID EXCESSIVE SKIN EXPOSURE TO SUNLIGHT AND SUNLAMPS WHILE UNDERGOING TREATMENT WITH THIS MEDICINE
DO NOT TAKE MILK, ANTACIDS, IRON OR CALCIUM SUPPLEMENTS WITHIN TWO HOURS OF EACH DOSE OF THIS MEDICINE.

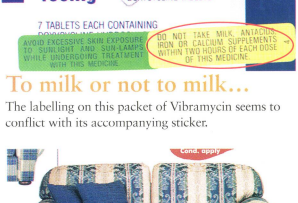
To milk or not to milk...

The labelling on this packet of Vibramycin seems to conflict with its accompanying sticker.

- Used correctly, your Click Electrical Safety Switch is designed to protect you against electrical faults to Earth, it DOES NOT offer overload protection.

HAVE YOU GOT PROTECTION?

Click seems to be a little confused as to whether or not its safety switch provides overload protection. That doesn't leave much hope for us consumers.



Quality-proof couch

Looking for a couch that "oozes quality" without leaving a stain? Put your sponge to work on this one!

How about a little help?

The hard word would like to thank all the readers who've responded with examples of outrageous ads, promotions and products. Thanks to V Mather, J Hibberd, M Neate, R Pollock, N Witton, P&P Hallinan and C Anderson for their contributions to this month's *The hard word*. Please keep sending them in.

If you have any examples you think deserve to be on this page, send them to *The hard word*, CHOICE, 57 Carrington Road, Marrickville 2204, or email your suggestions to thehardword@choice.com.au.

A request from our art team: If you send us clippings, labels or packaging, please keep them as clean and neat as possible (and don't mark them with highlighters or pens or cut the corners off, etc) so we can reproduce them on this page. Thank you.

for the publisher, Australian Consumers' Association, 57 Carrington Road, Marrickville 2204.